Diagnostic Considerations in
ANCIENT INDIAN SURGERY
CONSULTING EDITOR

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DIAGNOSTIC CONSIDERATIONS IN
ANCIENT INDIAN SURGERY
(BASED ON NIDĀNA-STHĀNA OF SUŚRUTA-SAMHITĀ)

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—Śrīmad-Bhagavadgītā
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CONSULTING EDITOR'S PAGE

I am happy to know that the Suśruta-Saṃhitā with English Commentary is now ready for publication in 12 volumes dealing with different aspects of Ancient Indian Surgery. This particular volume devoted to Nidāna-Sthāna is being brought out as "Diagnostic Considerations in Ancient Indian Surgery" first, because of its greater utility for the practising surgeons.

Here I must congratulate the Chief Editor, Dr. Singhal and his colleagues, for taking this stupendous task of writing such a valuable and useful commentary in an easily understandable English language.

Such a book as this was really overdue, and its utility has improved considerably since these commentaries are written by practising surgeons and other medical men.

I wish this venture a great success.

K. N. UDUPA
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Prof. of Surgery & Director,
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Varanasi
Banaras Hindu University,
14 May, 1972.
Varanasi.
FOREWORD

It is a common fault of the historians to handle sometime ancient medical works which they do not know.

This lack of knowledge, of course, may lead to affirm things that are not correct, because they have been badly handed down or misinterpreted by the person who referred the content of those ancient texts.

If this deficiency is deplorable in our occidental culture, especially with concern to Greek and Latin works which were not read directly, it may even more easily happen with works of the ancient oriental medicine.

The knowledge of those languages is indeed a rare exception for medical historians of the Occident.

Information on ancient Indian surgery, and in our case the existence of a great treatise of Suśruta Samhitā, represents acquisitions known to the western historians for having heard of them or thanks to references, more or less vague. There may also be known passages of some work, but this is not sufficient to affirm to have a thorough knowledge of the complete content of ancient Indian surgery and of the doctrines giving a complete and precise physiognomy of it.

The work completed by Dr. Singhal and his co-workers is indeed praiseworthy: the book which now comes to light is a precious source for the knowledge of the ancient surgery in which Suśruta, the best known surgeon of the civilization, remembers the greatness of Ayurveda as far as surgery is concerned.
The book Ancient Indian Surgery-Diagnostic Considerations is based on Nidāna-Sthāna of Suśruta Saṁhitā, the great ancient Indian Surgical treatise—an absolute classical work for the historical medical Sanskrit literature, for which the Author's name remains immortal in the History of Medicine.

The perfect knowledge of Dr. Singhal of the material, both the surgery and the language, are a sure guarantee for the reliability of the work.

The organization of each chapter of the book, the Summary put at the beginning, the Suggested Research Problems at the end of each chapter and the 4 line gists of each chapter, permit to any reader, even without knowing Sanskrit, to find the material of his interest without any difficulty.

The really monumental work of Dr. Singhal, the complete treatment of which consists of eleven volumes, merits therefore every praise and acknowledgement of the scholars of the History of Medicine throughout the world.

00185 ROMA

Viale Dell' Universita 34/A
15 Sept. 1971

Dr. Adalberto Pazzini

Director, Institute of History of Medicine,
University of Rome, Italy, &
Past President,
International Society of History of Medicine.
PREFACE

India has a great and ancient cultural heritage. Medical treatment (Āyurveda) flourished here centuries ago when people in other parts of the world were not so advanced. There is no dearth of evidence to prove these statements as is shown by the Vedās, Purāṇas and other subsequent Indian publications.

Āyurveda, the ancient Indian system of medicine, was practised about 1000 B. C. It is available today in three classical Samhitās or treatises, the Caraka, Suśruta and Vāgbhaṭa (in addition to many other smaller later publications). All were written in Sanskrit, the ages old Indian language comparable to the Greek or Latin of the Western World. Caraka and Vāgbhaṭa are books mainly on medicine whereas Suśruta is chiefly a surgical treatise.

As all these classical treatises have so far been available in Sanskrit only, they have been comparatively less well known to the modern world. A great necessity was felt to bring out the proud possessions of ours accepted as invaluable national literary treasures using contemporary scientific and medical terminology in a language understandable easily in many other parts of the world. Suśruta, the surgical treatise has been selected to be brought out first.

A great necessity has been felt by the scientists of the modern world, doctors, surgeons, historians, research workers and the educated class of public in general to be able to get to know Suśruta-Samhitā in the language understandable by them. English written in Roman script was selected as the language for translation as it is one of the international languages
and myself and other authors and translators here have a working knowledge of it.

Other attempts at translation and their drawback

The first attempt at translation of *Suśruta-Saṃhitā* was made in 1897 by Dr. A.F.R. Hoernle, C.I.E. His preface is quoted verbatim below:

"The present translation of the *Suśruta-Saṃhitā* has been undertaken by me at the special request of the Council of the Asiatic Society of Bengal. The original translation made by Dr. Udoy Chand Dutt was stopped by the untimely death of the translator, after the publication of his second fasciculus. Its continuation by another translator proved so unsatisfactory that it had to be abandoned, after one more fasciculus. Dr. U. Ch. Dutt's translation, though a very fair performance, laboured under the disadvantage, owing to the translator's want of knowledge of Sanskrit, of not being made directly from the original language. It also lacked elucidation from the works of commentators. Both points are remedied in the present translation, which accordingly has been commenced de novo."

Calcutta, 26th November, 1897 A.R.H.

The next attempt at translation only (without any comments etc.) of *Suśruta-Saṃhitā* was made by Kaviraj Kunj Lal Bhisagratna in 1907. He was a great Sanskrit scholar without modern medical or surgical background. Consequently, his book, though a brave and creditable attempt, could neither provide much help to the scientist, the research worker or the historian, nor could his interpretations be correlated with modern medical terminology. Kaviraj Bhisagratna's translation, at places gives the impression of being explanatory rather than literal and of being somewhat biased.

Hoernle's translation was more accurate than that of Kunjlal
or U. Ch. Dutt’s but the scientific comments were lacking and one could not find out the historical facts of importance or the problems on which scientists and research workers should concentrate. But whatever it is, he could bring out only one fasciculas of 98 pages of this much needed book.

The pattern followed in this book

The original has 186 chapters (1000 pages) in Sanskrit. Every verse or stanza in each chapter is numbered. Translation of each verse or stanza has now been done as accurately as possible. Each verse or a few verses together have been given followed immediately by their English syntax; each unit has been given a heading in modern terminology which is usually self-explanatory. Hence, footnotes have been given sparsely and only if their necessity has been felt strongly.

In addition, the volume has an ‘Introduction’ in the beginning which includes a “four line gist” of each chapter contained in that particular volume. Thus even a casual reader by reading the introduction would get to know the broad contents of the book. If the gist of any chapter interests him he could read more about it in the “Summary” given at the beginning of the chapter concerned. If any point further arouses his curiosity, he could turn over to the verse or stanza concerned with the heading outlined for him along with the original Sanskrit and its literal (syntax) translation “ready on the plate” as it were. And the reader has not got to go further than turning to the end of the chapter to look for the research problems that he may be interested in.

Importance of the book:

It is believed that this book would be a fundamental contribution to the History of Medicine. Our entire concept
of History of Medicine would need to be reoriented, e.g. classi-
ification of burns would begin by Suśruta and not Dupuytrens,
lithotomy operations should mention Suśruta before Ambroise
Pare, credit for describing signs of inflammation first should go
to Suśruta and not to Celsus and a host of other things such as
piles, fistula, skin diseases, eye diseases etc.

In addition, the research problems outlined in this book would
interest the Pharmacology Deptt., Botany Deptt., pharmaceuti-
tical drug companies, the surgeons and physicians, and the
research workers in the experimental surgery and other sections.

Presentation of this terse, ancient Sanskrit medicinal
classic in such a scientific yet easy and lucid way is something
unique. If even one good drug is found such as that mentioned
in S.S.I.14. which could be of value in haemostasis, e.g. after
prostatectomy or a bleeding disease, or its counterpart, a drug
which has anticoagulating properties of possible use in the
prevention and cure of cerebral or coronary thrombosis, it would
be a drug worth its price.

Translation has been checked many times by competent
authorities. Summary and research aspects, comments and
references have been carefully written. Still it would be a
great wonder if scope for improvement was not found. Many
mistakes would certainly be pointed out by the learned readers
which would be tried to be rectified in subsequent editions.

Book 3 on Diagnostic Considerations is being brought out
first because of its greater practical utility. It is expected that
the other books of the series would be published in rapid
succession.

26 January, 1972
Varanasi, India

G. D. Singhal
L. M. Singh
K. P. Singh
ACKNOWLEDGEMENT

I am very grateful to Dr. L. M. Singh, my constant colleague in the production of this great enterprise.

I am greatly indebted to Prof. K. N. Udupa, M. S., F.R.C.S.(C), F.A.C.S, F.A.M.S., Professor of Surgery and Director, Institute of Medical Sciences for agreeing to be the consulting editor.

I am also grateful to Prof. A. Pazzini, Director, Institute of History of Medicine, University of Rome for writing the foreword and to the Manager, Sammelan Mudranalaya, Allahabad for printing it.

I also acknowledge my sincere thanks to Dr. B. P. Verma, M. S., M. S. (Orth.), Reader in Orthopaedics, Dr. Gurumohan Singh, M. D. (Dermat.), Reader in Skin & V. D., and Dr. A. B. Srivastava, B. D. S., M. D. S., F. I. C. D., Reader in Dental Surgery of The Institute of Medical Sciences for their helpful comments on Ch. 3, 5 and 16 respectively.

I offer my sincere gratitude to the various other members of the editorial board also who have taken part in shaping the various chapters of this book.

It is now in your hands. You are the judge. Your valuable opinion and suggestions are earnestly requested. Your comments would be of help in subsequent editions of this and of other volumes of Ancient Indian Surgery series where due acknowledgement would be given.

New F/1, Hyderabad Colony,
B.H.U., Varanasi–5, India.

G. D. Singhal

26 January, 1972
COAUTHOR'S NOTE

It is a very happy day that the time has come for me to write a few words when this book is going to the press. I had always felt that a great part of the world was still ignorant about the hidden treasures which India had in its ancient books. Ever since my student days I had an earnest desire to translate our ancient Indian medical books in such a way that millions of people who live outside India may also be able to read and talk about them.

Proper help and guidance of some interested person was obviously vital to start such an august work. The opportunity presented itself when Dr. G. D. Singhal, M.S., F.R.C.S. (Edin.), joined the College of Medical Sciences in the Department of Surgery. He was so interested in translation work of Indian books on Medical Sciences into English that he wrote a book on "Surgical Ethics in Āyurveda" within a year of his stay in this University. With the unimaginable success of this book his interest deepened for further translation work of the whole "SUŚRUTA-SAMHITĀ" with a surgeon's approach.

Since the work load for the complete translation was beyond the capacity of one man alone and as it demanded a team work, Dr. Singhal wanted the help of some interested persons. As soon as he came to know about my interest in the uplifting and propagation of Āyurveda in a scientific way he approached and requested me to join in the team. Needless to say I was only too glad to accept the offer as it was one of my cherished ambitions for a long time.

I selected to work on Nidāna-Sthāna (the canto dealing with the etiopathogenesis) for many reasons. This section
deals with the causative factors and diagnosis of diseases which form the basis for further study; understanding, teaching and research work. This section perhaps is one of the most important contributions that *Suśruta* had made towards Ancient Indian Surgery. (I also knew that this was one of the smaller cantos and was likely to finish sooner than others!)

As the work progressed another helping hand was required. Dr. L. M. Singh, Reader in Šalya Department of the Post Graduate Institute of Indian Medicine, readily accepted our request and proved that if there was a will, there was a way. With the help of Dr. Singh the speed of translation work came into full swing and the initial work was completed within a very short time. Continuing the work with greater zeal and enthusiasm this section was thus finalised before others and hence it is being published earlier. It has been only due to the untiring efforts of Dr. L. M. Singh that this work has attained its present shape.

I would be failing in my duty if I did not express my deep sense of gratitude to Dr. G. D. Singhal, M. S., F.R.C.S. (Edin.), who has been the main architect of this entire project. He has been the life and soul from the conception of this book to its completion today and it has been only due to his constant persuasion and encouragements that we all joined hands together and worked so harmoniously. But for his missionary spirit and incessant goadings, which at times were painful, these chapters would not have taken the shape in which they are being presented here.

The success of this work depends on its readers, who might be the undergraduate or postgraduate medical students, the historians of medicine or the research workers, the surgeons
or Ayurveda scholars or any one else interested in it. If this book proves to be of any help to them during their medical education, teaching or research work etc., I shall feel, our efforts have been fruitful.

In the end I would very modestly like to emphasize the unparalleled style of this work, as a book of quotable quotes designed exclusively for the reader to help him pick out the required quotation that he may be looking for in no time, even though he may not at all be conversant with Sanskrit.

This presentation is not just a translation. The Sanskrit syntax provided is half the work only; another quarter consists of the 'four line gists' included in the Introduction, the 'Summaries' provided at the beginning of each chapter and the 'Headings' given for each unit of verses/stanzas: and the remaining quarter of the work consists of the list of 'Suggested Research Problems' at the end of each chapter.

Varanasi, 29th April, 1971.

K. P. SINGH
Asst. Superintendent,
S. S. Hospital,
Banaras Hindu University.
KEY TO TRANSLITERATION

a ai i u ur e ai o au am ah

k ka kh kha g ga gha na

c ca cha ja jha na

ta tha da dha na

ta tha da dha na

pa pha ba bha ma

ya ra la va

sa sa sa sa ha

ksha tra jna
<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>S. S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suśruta-Saṁhitā</td>
<td></td>
</tr>
<tr>
<td>- Sūtra-Sthāna</td>
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</tr>
<tr>
<td>- Nidāna-Sthāna</td>
<td>Š.S.II</td>
</tr>
<tr>
<td>- Šārīra-Sthāna</td>
<td>Š.S.III</td>
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<tr>
<td>- Cikitsā-Sthāna</td>
<td>Š.S.IV</td>
</tr>
<tr>
<td>- Kalpa-Sthāna</td>
<td>Š.S.V</td>
</tr>
<tr>
<td>- Uttara-Tantra</td>
<td>Š.S.VI</td>
</tr>
<tr>
<td>Caraka-Saṁhitā</td>
<td>C. S.</td>
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<td>- Sūtra-Sthāna</td>
<td>C. S. I</td>
</tr>
<tr>
<td>- Nidāna-Sthāna</td>
<td>C. S. II</td>
</tr>
<tr>
<td>- Vimāna-Sthāna</td>
<td>C. S. III</td>
</tr>
<tr>
<td>- Šārīra-Sthāna</td>
<td>C. S. IV</td>
</tr>
<tr>
<td>- Indriya-Sthāna</td>
<td>C. S. V</td>
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<tr>
<td>- Cikitsā-Sthāna</td>
<td>C. S. VI</td>
</tr>
<tr>
<td>- Kalpa-Sthāna</td>
<td>C. S. VII</td>
</tr>
<tr>
<td>- Siddhi-Sthāna</td>
<td>C. S. VIII</td>
</tr>
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<tr>
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<td>V. V.</td>
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</tr>
<tr>
<td>- Šārīra-Sthāna</td>
<td>V. V. II</td>
</tr>
<tr>
<td>- Nidāna-Sthāna</td>
<td>V. V. III</td>
</tr>
<tr>
<td>- Cikitsā-Sthāna</td>
<td>V. V. IV</td>
</tr>
<tr>
<td>- Kalpa (Siddhi)-Sthāna</td>
<td>V. V. V</td>
</tr>
<tr>
<td>- Uttara-Tantra</td>
<td>V. V. VI</td>
</tr>
<tr>
<td>Kāśyapa-Saṁhitā</td>
<td>K. S.</td>
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<tr>
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<td>C. D.</td>
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</tr>
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<td></td>
</tr>
</tbody>
</table>
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>xi</td>
</tr>
<tr>
<td>Preface</td>
<td>xiii</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>xvii</td>
</tr>
<tr>
<td>Coauthor's Note</td>
<td>xviii</td>
</tr>
<tr>
<td>Key to transliteration</td>
<td>xxiii</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>xxiv</td>
</tr>
<tr>
<td>Contents</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
</tbody>
</table>

# CHAPTERS

1. The Diagnosis of Vātika Diseases  
2. The Diagnosis of Piles  
3. The Diagnosis of Urinary Calculi  
4. The Diagnosis of Fistula-in-ano  
5. The Diagnosis of Skin Diseases  
6. The Diagnosis of Urinary Abnormalities  
7. The Diagnosis of Abdominal Enlargements  
8. The Diagnosis of Abnormal Foetal Presentations  
9. The Diagnosis of Abscesses  
10. The Diagnosis of Spreading Cellulitis, Sinuses and Breast Diseases  
11. The Diagnosis of Glandular Swellings, Cervical Lymphadenopathy, Tumours and Goitres  
12. The Diagnosis of Scrotal Swellings, Venereal Diseases and Elephantiasis  
13. The Diagnosis of Minor Diseases  
14. The Diagnosis of Śūka Doṣa  
15. The Diagnosis of Fractures and Dislocations  
16. The Diagnosis of Oral Diseases
INTRODUCTION

Nidāna-Sthāna or the Section on Diagnostic Considerations consists of sixteen chapters. All these deal with the aetiology and signs and symptoms of the various important surgical diseases. The management of these various diseases has been dealt with in the first half of Cikitsā-Sthāna (S.S. IV), the section on treatment.

The salient features of these chapters are as follows:

**Chapter 1** It deals with the locations and functions of the five types of vātas in the body in health and the clinical features of the diseases produced by their vitiation alone or in association with other doshas. (Pages 7—32).

**Chapter 2** It deals with the aetiology, anatomical considerations, pathogenesis and prognosis of anal piles. It also deals with the diagnosis of fleshy protuberant lesions (resembling piles) in other areas of the body. (Pages 33—48).

**Chapter 3** It deals with the anatomical and physiological considerations of urinary bladder, the aetiology, pathogenesis, premonitory symptoms, clinical features and complications of the four types of vesical calculi and of seminal concretions and urinary gravel. (Pages 49—62).

**Chapter 4** It deals with the aetiology, pathogenesis, clinical features, diagnosis and prognosis of the five types of fistula-in-ano. (Pages 63—74).
Chapter 5  It deals with the aetiology, pathogenesis, clinical features, complications and prognosis of the seven major and eleven minor skin diseases (including leprosy) and the three types of leucoderma. It also describes the modes of spread of contagious diseases. (Pages 75—92).

Chapter 6  It deals with the aetiology, pathogenesis, clinical features and complications of the twenty urinary abnormalities. Clinical features and prognosis of the ten types of associated boils have also been given. (Pages 93—108).

Chapter 7  It deals with the aetiology, pathogenesis, clinical features and prognosis of eight types of abdominal enlargements including intestinal obstruction, perforation, splenomegaly and ascites. (Pages 109—120).

Chapter 8  It deals with the aetiology, pathogenesis and prognosis of various forms of foetal malpresentations and mentions Caesarian section to save the child. (Pages 121—132).

Chapter 9  It deals with the etiology, pathogenesis and clinical features of external abscesses of six types, internal abscesses including puerperal sepsis and acute osteomyelitis, differentiating features of a gaseous abdominal swelling and an intra-abdominal abscess. (Pages 133—146).

Chapter 10  It deals with the etiology, pathogenesis, clinical features and prognosis of various types of cellulitis and sinuses as well as those of some breast diseases. (Pages 147—160).
Chapter 11
It deals with the etiology, clinical features and prognosis of various types of glandular swellings, lymphadenitis, tumours and goitres.  
(Pages 161–172).

Chapter 12
It deals with the etiology, pathogenesis and clinical features of various types of scrotal and inguinoscrotal swellings, venereal and allied diseases and elephantiasis.  
(Pages 173–184).

Chapter 13
It deals with the etiology, pathogenesis and clinical features of forty-four miscellaneous diseases mostly of skin and its appendages, lymph nodes and external urogenital organs.  
(Pages 185–204).

Chapter 14
It deals with the etiology and clinical features of the infective and traumatic lesions of penis caused by the local applications of watermoss to elongate it.  
(Pages 205–214).

Chapter 15
It deals with the etiology, clinical and prognostic features of fractures and dislocations.  
(Pages 215–226).

Chapter 16
It deals with etiology, classification and clinical features of the diseases of the oral cavity including those of the lips, gums, teeth, tongue, palate and throat.  
(Pages 227–250).
वातव्याधि-निदानस्
Diagnosis of Vātika Diseases

CHAPTER ONE
NIDĀNA-STHĀNA
1. The chapter begins by Suśruta’s enquiry (3, 4) from Lord Dhanvantari regarding the locations and functions of vāta in health and in disease. The Lord describes the general characteristics of vāta (5–10) and then the specific features of the five types of vātas (prāṇa, udāna, samāna, vyāna and aṭāna) in health (11–20/1).

2. The general effects of vitiated vāta as also its local effect on different organs of the body such as stomach, intestine, skin etc. have been described (20/2–31/1).

3. Effects produced by the association of vāta in general and of the different types of vātas in particular with the other types of doṣas such as pitta, kapha and ṣoṣita have been given (31/2–39).

4. Nomenclature and clinical features of the various and diverse diseases produced by vitiated vāta have been described (40–91).
अथ निदानस्थानम्

NIDĀNA-STHĀNA

प्रथमोऽध्यायः

Chapter One

1. अथातो वातव्याघ्रिनिदानं व्याप्तायाम्।

Now we would expound upon the “Diagnosis of Vātika Diseases”.

2. यथोवाच भगवान् धन्वन्तरः।

As was described by Lord Dhanvantari

3, 4. Suśruta’s Enquiry

Suśruta asks touching the feet of Dhanvantari, pre-eminent amongst the supporters of religion and whose origin has taken place along with ambrosia.

Foremost amongst the expounders! Could you please tell me the locations, functions and disorders of the vāta in its normal state and of the one which is vitiated due to its irritants.

1. The management of these diseases has been discussed in S.S. IV.4 and S.S. IV.5.
5. Dhanvantari's Reply

तत्स्य तदिर्विमं भूत्वा प्रावर्षीद्रष्ट्रजां वरः।
स्वयंभूरेष भगवान् वायुर्नियमिन्निविष्कितः।।१५।।

After hearing these words of his, the supreme amongst the physicians spoke: This vāyu is known as the self existent Bhagavān himself.

6—9/1. General Characteristics of Vāta

स्वातन्त्र्यतन्त्रतत्त्ववात्स्य सर्वत्वात्तथं च।
सर्वार्थं सर्वाश्च सर्वोलक्षणसः।।१६।।
स्थित्यत्तत्त्वतिवात्स्य भूतानामेष कारणम्।
अवय्वक्तो व्यक्तकर्मी च रुधः शीतोऽत्पः त्वः:।।१७।।
तिम्मगो हिर्गुणश्वं रजोवखल: एव च।
अविन्द्यवीयों दोषाणां नेता रोगसूक्ष्यराद्।।८।।
आशुकारी सृष्टाचारी पवाधानगुदालयः।

As it is independent and eternal and is also all-pervading it is the soul of all living beings and is held in esteem everywhere.

This is the cause of origin, existence and destruction of all living beings. Although invisible, the vāyu manifests itself by its functions. It is also dry, cold, light and rough.

It traverses obliquely, has two attributes and is predominantly rajas. It has unimaginable energy, is the activator of doṣas and is the chief cause of the groups of disorders.

It is quick acting, keeps on moving repeatedly and is mainly located in the intestines and rectum.

1. God possessing all powers e.g. omnipresence etc.
2. Tactile and acoustic.
3. Other two properties being tamas and sattva.
4. Vāta, pitta and kapha.
9/2, 10. Functions of Vāta in Health

Now please listen to the features produced due to its movements in the body.

The unvitiated vāyu maintains the equilibrium between doṣas, dhātas and metabolic fire and also helps in the perception of objects of senses by inducing the systems to function in their normal ways.

11, 12. Five types of Vātas

As the agni (pitta) is of five types depending upon name, location, functions and the disorders, similarly the one vāyu is of different types depending upon its nomenclature, locations, function and diseases.

The five types of vāyus are prāṇa, udāna, samāna, vyāna and apāna. Located in their specific places, they maintain the (structure and functions of) living beings.

13, 14/1. Prāṇa Vāyu

1. Sound, touch, form, taste and smell.
That vāyu which circulates in the oral cavity is named prāna (vāyu) and it maintains the body. The same (vāyu) makes the food enter inside (allows deglutition) and it also supports the life. When vitiated, it often produces disorders like hiccup, respiratory difficulty etc.

14/2, 15. Udāna Vāyu

उदानो नाम यस्तो ब्रुमयैति पनन्टमः। ।१४।
तेन भाषितगोताबिनिविशयोस्मिस्मिर्वते।
उळ्हज्ञुग्यातन् रोगान् करोिति च विशेषः।।१५।

That (vāyu) which travels upwards is called udāna and is the best among the vāyus. Speech, songs etc are specially initiated by the same. And it produces diseases specifically of structures above the clavicle (head and neck).

16, 17/1. Samāna Vāyu

आमवक्वाक्षवः समानो बिहित्स्त।
सोज्ञं पचति तज्जांदच विशेषानिविशेषकं हि।।१६।
गूढऩ्निष्यसदासासारस्मृतीन् कुस्ते गावन्।

That (vāyu) which circulates in the stomach and intestines is the samāna vāyu. In association with the metabolic fire (digestive juice and enzymes) it digests the food and specially separates their end products. It causes abdominal swelling, indigestion, diarrhoea etc.

17/2, 18. Vyāna Vāyu

कुंश्वेदंहरे व्यालो रससंबंधनोत्तः।।१७।
स्वेदासुक्लङ्कांगिवापि यक्षघा चेष्टयत्वपि।
कुंश्वेदं कुस्य रोगान् प्रायश्च सरंवेदंगान्।।१८।

1. Twelve types: Ref. to SS. III. 4.3.
That (vāyu) which diffuses all over the body is the vyāna vāyu and is constantly engaged in the transport of rasa. It helps in sweating and also in the flow of blood. And its (voluntary) movements are of five types (expansion, contraction, upward, downward, and oblique). Upon being vitiated it often produces diseases which are generalized.

19, 20/1. Apāna Vāyu

That which is situated in the lower bowels is the apāna vāyu and by this vāyu faeces, urine, semen, foetus and menstrual fluid are brought down (and expelled) at appropriate times. Upon being vitiated, it produces serious diseases located in the bladder and rectum.

20/2, 21/1. General Effects of Vitiated Vāyus

Seminal disorders and abnormal urinary discharges\(^1\) owe their origin to the vitiation of vyāna and apāna vāyus.

And when all the vāyus get simultaneously vitiated, the body undoubtedly gets destroyed.

21/2, 22/1. Local Effects of Vitiated Vāyus

1. *Genito-urinary disorders.*
Now I would further discourse upon those diseases which are produced by excessively vitiated vāyu situated in different places.

22/2, 23/1. Effects of Vitiated Vāyu on Stomach

वायुरामाख्ये कुदुरिच्छिन्ने कुश्ते गवानु।।२२॥

मोहं सूच्छां विमासां च हुदुग्रहं पाश्च्चवेदनाम्।

When the vāyu situated in āmāśaya (the stomach) gets vitiated it produces vomiting etc., and also stupor, unconsciousness, thirst, constricting pain in the precordium and pain in the sides.

23/2, 24. Effects of Vitiated Vāyu on the Intestines and Ear etc.

पक्वापात्यस्थोऽत्रकूजं शूलं नामी करोति च।।२३॥

कुदुरिच्छिन्ने प्ररोपात्वमानां हरिक्वेदनाम्।

श्रोत्रविशिष्टिवियवग्वं कुर्यत् कुदुः समीरणः।।२४॥

Vitiation of vāyu situated in pakośāya (the intestines) causes gurgling, pain in the umbilical region, dysuria, difficulty in opening the bowels, abdominal distension and low back pain. Vitiated vāyu located in the ear etc. causes impairment of the respective sense organ.

25. Effects of Vitiated Vāyu on the Skin

वृक्षायं स्फुरणं रोक्षयं सुरूतं चमुच्चमायनम्।

त्वक्कघो निस्तोदत्त कुर्यत् त्वाग्गेदं परिपोषनम्।।२५॥

(Upon vitiation of the vāyu) situated in the skin, depigmentation, twitching, roughness, numbness, tingling, pins and needles and sensation of tearing and splitting of the skin are produced.
26—29 Effects of Vitiated Vāyu on Miscellaneous Sites.

(Upon vitiation of the vāyu situated) in the blood it causes ulcers, in the muscles it causes painful knotty swellings and located in the fat it produces mildly painful glands without ulceration; upon getting into the veins it causes pain, contraction or engorgement; if it gets into the ligaments it causes stiffness, instability, pain and convulsions; if it gets into the joints, it causes pain and swelling and impairs its functions; if it gets into the bones, it causes bone atrophy and cracks and pain; and if it gets into the marrow it produces pain which never subsides. If it (vitiating vāyu) gets into the semen, discharge of the later ceases or it becomes abnormal.

30, 31/1. Effects of Generalised Vitiation of Vāyu.

Upon generalized vitiation of the vāyu in the human beings, it circulates in their hands, feet, head and in the tissues respectively and gets diffused all over the body. Then it produces generalised stiffness, convulsions, numbness, swelling and pain.
31/2-34/1. Effects of Association of Vitiated Vāta With The Other Doṣas.

When the vitiated vāyu situated in the above mentioned regions gets associated with (pitta etc.), it produces mixed types (of afflictions); and when this vāyu reaches different organs, it produces different types of disorders in them.

Upon the association of vāyu with pitta, burning sensation, hyperpyrexia and unconsciousness are produced.

Upon its (vāyu) association with kapha, coldness, swelling and heaviness are produced.

Upon the association of vāyu with sonita pricking sensation by needles, hyperaesthesia, numbness and the remaining disorders of vitiated pitta are produced.

34/2-39. Effects of Masking of The Five Types of Vāta by Pitta and Kapha.

34/2, 35/1. Masking of Prāṇa Vāyu by Pitta and Kapha.

Upon masking of prāṇa vāyu by pitta vomiting and burning sensation are produced; and upon its masking by kapha, weakness, lethargy, drowsiness and discolouration are produced.
35/2, 36/1. Union of Udāna Vāyu, Pitta and Kapha.

उदाने पितासंयुक्ते मूच्छवाहग्रभक्तम् ॥३५॥
अस्वेस्वर्यें मयकोर्णिन्: शीतस्तंभों कफावृते ॥

Upon union of udāna vāyu with pitta, unconsciousness, burning sensation, giddiness and tiredness are produced; and upon its union with kapha anhidrosis, weak digestion, horripilation, feeling of coldness, and stiffness are produced.

36/2, 37/1. Union of Samāna Vāyu with Pitta and Kapha.

समाने पितासंयुक्ते स्वेस्वाभावमूच्छठनस् ॥३६॥
कफाधिकं च बिख्मूत्रं रामहर्षः कफावृते ॥

Upon union of samāna vāyu with pitta, perspiration, burning sensation, feeling of heat and unconsciousness are produced; and upon its union with kapha excessive mucus comes with urine and stools and horripilation takes place.

37/2, 38/1. Union of Apāna Vāyu with Pitta and Kapha.

अपाने पितासंयुक्ते दाहोण्ये स्यादसूदरः ॥३७॥
अथःकायगुहवं च तत्सिर्स्वेप कफावृते ॥

Upon union of apāna vāyu with pitta burning sensation, heat and menorrhagia and metrorrhagia are produced and upon masking by kapha heaviness in the lower half of the body is produced.

38/2, 39. Masking of Vyāna Vāyu by Pitta and Kapha.

Vyāने पितासूत्रे दाहो गात्रिक्षेपणं कलम् ॥३८॥
गुहणि सर्वाभावाणि स्तम्भनं चास्तिक्षेपणां ॥
लिङ्गं कफावृते व्याने चेष्टास्तम्भस्तथं च ॥३९॥
Upon masking of *vyāna vāyu* by *pitta*, burning sensation, convulsions of limbs and tiredness are produced; and upon its masking by *kapha* symptoms of heaviness all over the body, stiffness in the bones and joints, and also cessation of all voluntary movements are produced.

40, 41. Aetiology of Vāta-Rakta (Gout)

(Vāta-rakta (gout) occurs usually in the person(s) with delicate constitution and in the obese who take faulty diet or who lead a faulty life, who suffer from excessive sickness or fatigue due to excessive walking and excessive indulgence in wine, women and exercise, in those who lead a life opposite to that indicated according to seasons, who get defective oleation treatment etc. and in those who abstain from sexual intercourse.

42-44. Vitiation and Domination of Rakta by Vāta (Vāta-Rakta), Pitta and Kapha.

1. Apte p. 504/1
2. Rangaśākara.
It is called vāta-rakta because of its (blood’s) saturation with vāta and its predominance by the same; similarly the blood vitiated by pitta and the blood vitiated by kapha should also be known.

Vāyu gets vitiated due to riding on an elephant, horse or camel, by the use of its (vāyu) other causative factors, by the use of bitter, hot, acidic, alkaline, vegetable and other eatables, and by repeated exposure to heat.\(^1\) The rakta becomes vitiated soon and it then obstructs the pathway of vāyu immediately. That vāyu due to obstruction in its pathway becomes more aggravated and further vitiates the already vitated blood at the same time.

45, 46. Pedal Symptoms produced by the Doṣas uniting with Rakta.

Due to vāta-rakta, hyperaesthesis, pins and needles, tearing pain, dryness and numbness in the feet are produced.

Due to association of pitta and rakta acute burning pain and very hot and red swelling occurs which is soft also.

Combination of the vitiated śleṣmā with rakta produces itching, palor, coldness, swelling, thickened and firm (feet).

Upon vitiation of all the doṣas together along with rakta, each of them manifests its own features in the feet.

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1: Exposure to sun etc.
47. Prodromal Features of Vāta-Rakta.

The prodromal features are slackness, perspiration, and coldness or the reverse of all these, in association with discolouration, pins and needles, numbness, heaviness and burning sensation (in the feet).

48. Spread of Vāta-Rakta.

This disease spreads all over the body like a virulent rat poison beginning from the sole of the feet or sometimes from the hands.

49, 50/1. Prognosis of Vāta-Rakta.

That vāta-rakta in which exfoliation occurs upto knee, and also which cracks and in which discharge occurs, and which is associated with the complications of loss of vitality and flesh is incurable; that which is of one year’s duration should be considered relievable only.

50/2, 51. Ākṣepaka (Convulsions)

When all the arteries become affected by the vitiated vāyu, it often results in quick and repeated convulsions
throughout the body; because of the repeated convulsions, it is known as ākṣepaka.

52/1. Apatānaka (Repeated Convulsions).

That (disease) is called apatānaka in which (the convulsions) occur at repeated intervals.

52/2, 53/1. Danḍāpatānaka (Orthotonos)

If the vāyu mixed intimately with kapha gets fixed in those (vessels) the patient becomes stiff like a pole; the disease is called danḍāpatānaka and is curable with difficulty.

53/2. Hanugraha (Trismus).

Then serious lock jaw takes place and therefore food is taken with difficulty.

54-57/1. Dhanustambha (Emprosthotonos and Opisthotonos).

That in which the patient is bent like a bow is called dhanuḥstambha.
Two Types of Dhanustambha: (Abhyantarāyāma and Bāhyāyāma)

When the powerfully vitiated vāyu situated in the toes, ankle, abdomen, heart, chest and neck causes spasm of their ligaments leading to fixed eyes, lock jaw, fractures in the sides and vomiting of mucus and bending the patient (ventrally) like a bow, the (disease) is called Abhyantarāyāma (empresthotonos).

When situated in the external ligaments (of the structures mentioned above), it causes Bāhyāyāma (opisthotonos).  

57/2. Prognosis of Dhanustambha.

प्राहुवेक्षेकुटपूर्वभन्जनम् ॥15॥

That (dhanustambha) is called incurable by the wise in which fractures of chest, lumber spine and thigh occur.

58. Aetiology of Āksepaka.

कपारितान्वितो वायुवायुरेव च केवलः ॥
कुष्ठाक्षेपं त्वमेन चतुर्मभिघातजम् ॥15॥

Vāyu in association with kapha or pitta or vāyu alone causes ākṣepaka; the fourth variety is traumatic in origin.

59. The Incurable Āpatānakas.

गर्भपतनिनिमित्तश्च शोणितातिलवाच्च यः ॥
अमिहातनिनिमित्तश्च न सिध्धतयपतानकः ॥15॥

That āpatānakas is incurable with is caused by abortion, excessive bleeding or trauma.

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1. Bending dorsally.
2. S. S. II. 1. 54/1 to 57/1.
3. S. S. II. 1. 50/2 to 51.
4. S. S. II. 1. 52/1.
60-63. Pakṣāghāta (Hemiplegia)

When the excessively vitiated vāyu diffuses into the arteries going downwards, obliquely and upwards in the body, it loosens the supports of the joints on either side of the body, and causes paralysis of that same side; this is called hemiplegia by the best among the physicians.

The patient afflicted by the vitiated vāyu, half of whose body gets paralysed or has sensory loss (suddenly) falls down or even leaves (this world).

Hemiplegia caused by vāyu only is known to be curable with difficulty; when (it is caused by (vāyu) in association with others (pitta and kapha) it is curable; and it is incurable if it is due to the wasting (of dhātu).

64-66. Apatantraka (Convulsive fit).
The vitiated vāyu having gone upwards from its normal location produces pain in the heart, head and temples and produces convulsions and bending of the limbs; the eyes are closed and fixed, the person becomes listless and makes inarticulate sounds, is apnoeic or has respiration with difficulty and looses his consciousness; normalcy is restored when the heart gets freed, and upon reversal unconsciousness sets in again; this is called apatantraka and is produced when the kapha gets mixed up with vāta.

67. Mānyāstambha (Wry neck, Torticollis)

Sleeping by day, unsuitable sitting and standing postures, and looking up obliquely produce manyāstambha; the same is due to mixing up of kapha with vāyu.

68-73. Ardita (Facial-Paralysis).

(गभिणीसूतिकावालबृहस्पतिः) मन्यास्तम्भ वा।
(उच्छेदः) कठिनाः।
हस्ते जूत्मते। भाराभिषमाच्छयानवपि।
(शरीरसाधः स्वस्तिकावालबुश्चतुष्कशक्ये।)
अंगेऽस्तत्रवानितो वक्रर्दितं जनयत्थल।
(वक्रियासाधः स्वस्तिकावालबुश्चतुष्कशक्ये।)
शारिरशुचिः वाक्सन्द्रो नेत्रानितो च वैक्षेत्रम्।
(शारिरशुचिः स्वस्तिकावालबुश्चतुष्कशक्ये।)
प्रीवाचिबुकद्वानां तल्मान् पाल्चवेनु बेदना।
(शारिरशुचिः स्वस्तिकावालबुश्चतुष्कशक्ये।)
वायुस्च त्वचि स्वास्त्वद्वो मन्यास्तम्भवेद्य।
(तमोसः स्वस्तिकावालबुश्चतुष्कशक्ये।)
करणस्तितिमित्रमथुपत्यं रोगपालस्तथ।
(तत्त्ववेद्यं स्वस्तिकावालबुश्चतुष्कशक्ये।)
न सिद्धयत्वादित बादं त्रिघां वेपनस्तथ।
In the pregnant women, in puerperium, in the young and the old, in the emaciated and in those who have lost blood; due to shouting excessively loudly or biting hard substances and also due to (excessive) laughter, yawning, carrying heavy loads and due to sleeping on uneven bed, the vitiated vāyu having reached the joints of head, nose, lips, chin, forehead and the eyes afflicts the face and produces facial paralysis.

Symptoms of Ardita

Half of the face becomes twisted and the neck also rotates; there is instability of the head, aphasia, and deformity in the eyes etc; and there is pain in the sides of the neck, chin and teeth.

Prodromal Symptoms

Its prodromal symptoms are horripilation, tremors, and muddy eyes; and the vitiated vāyu having gone upwards produces numbness of the skin locally as well as pins and needles in the skin and torticollis and lockjaw; this is called ardita disease by the specialists.

Prognosis of Ardita

Ardita of the emaciated, of the one having fixed eyes and of one whose speech is continuously inarticulate, is not curable; as also when it is advanced, is of three years duration or when it is associated with tremors.

74. Gṛdhrasī (Sciatica).

When the ligaments from the heel up to all the toes are afflicted by the vitiatiated vāyu, movements of the lower extremity get restricted; that is known as gṛdhrasī.
75. Viśvācī (Brachial Neuralgia)

When the ligaments of the palm including the fingers as well as those of the dorsal aspect of upper extremity (are afflicted by the vitiated vāta) movements of the upper extremity get restricted; that is known as viśvācī.

76. Kroṣṭukāsīrṣa (Synovitis of Knee with Effusion)

Excessively painful and big swelling in the knee like the head of jackal due to the vitiated vāta and śonita is called kroṣṭukāsīrṣa.1

77. Lame and Cripple.

When the vitiated vāyu situated in the lumbar region afflicts the ligaments of the lower extremity, it is called khaṇja (lame) in the living beings; and when it cripples both the lower extremities it is known as paṅgu (Cripple).

78. Kalāyakhanja (Khesari Palsy, Lathyrisim)

When there is trembling in taking the first few steps,

1. The word literally means “head of a jackal”. Massive effusion in the knee joint fills up the suprapatellar and infrapatellar pouches with patella perched up in the middle, the whole swelling looking like the head of a jackal (kroṣṭukāsīrṣa).
limping and when organisation of the joint gets loose, it is known as kālayakhanja.¹

79. Vāta-Kaṇṭaka (Heel pain).

न्यस्ते तु विषमीः (में) पादे हजः कुर्यात् समीरणः।।
बातकण्ठक इत्येष विजेषः।खुड़काशितः।।७९।।

Walking on uneven ground causes pain in the heel due to the vāta situated in the heels; that is known as vāta kaṇṭaka.

80. Pādadāha (Burning Feet Syndrome)

पादयोः कुश्ते दाहः पितासूक्ष्महितोष्णितः।।
विपशष्टतद्वः कम्पणात् पाददाहं तमादिशेऽन्।।८०।।

When burning is caused in both the feet, specially on walking, due to the vitiated vāta alongwith pitta and rakta, that is known as pādadāha.

81. Pādahrāṣa (Peripheral neuritis of the feet)

हृष्णतत्तवरणोऽस्य भवतश्च प्रसूप्तवत्।।
पादहर्ष: स विजेषः।कफबातायकोपजः।।८१।।

When there is tingling and numbness in the feet due to the vitiated vāta alongwith kapha, that is known as pādahrāṣa.

82. Avabāhuka (Wasting of shoulder joint).

अंसवेदेशस्ति वायुः शोषितवांसलशन्धनम्।।
सिराश्चाकुह्य तत्रस्थो जनयत्ववाहुक्रमः।।८२।।

The vitiated vāyu situated in the shoulder region causes wasting of the shoulder joint and it also causes the contraction of veins situated therein, thus producing avabāhuka.

83. Bādhirya (Deafness)

यवा शब्दसः स्रोते वायुररूपः लिङ्गः।।
शुष्कः शलेश्वराच्यो वापिः वापिः तेन जायते।।८३।।

¹ kālaya—kātasa pulse.
When vāyu alone or with kapha covers and gets located in the acoustic channels, it produces deafness.

84. Karnaśūla (Earache, Otalgia).

When there is tearing sensation in the jaw, temple, head and neck and pain in both the ears due to the vitiated vāyu, it is called karnaśūla.

85. Speech Disorders.

When the speech carrying channels get blocked up by the vitiated vāyu along with kapha, it disables the persons and produces aphasia, nasal twang and stammering.

86, 87. Tūnī (Bladder Pain) & Pratitūnī (Proctalgia)

When the pain arising from the rectum and urinary bladder travels down and produces tearing sensation in the anus and the genitals that, is known as tūnī.

The same (pain), when arises from the anus and the genitals and travels in the opposite direction reaching the colon forcefully, is known as pratitūnī.

88. Ādhamāna (Tympanitis, Meteorism).
Very severe pain accompanied by borborygm and excessive distension of abdomen is produced due to severe obstruction of vāta and is known as ādhamāna.

89. Prātyadhmāna (Acute Gastric Dilatation).

विभूतमाय्क्ष्यं तदेवमाय्क्ष्यस्तिथितम्।
प्रत्याध्मानं विज्ञानीयात् कफव्याकूलितानिलम्।

When the sides and the precordium are free and (distension) originates from the stomach due to the vitiated vāta with kapha, it is known as pratyādhamāna.

90. Vātaśṭhīlā (Benign Prostatic Enlargement).

अष्टोलाब्धिनं प्रत्याध्माय्क्ष्यस्तिथितम्।
वाताश्चिल विज्ञानीयालथार्मार्गाध्विनिलम्।

The gland which is organised like round stone, which enlarges upwards and is bulging and which causes obstruction to the external passages, is known as vātaśṭhilā.

91. Pratyaśṭhīlā (Malignant Prostatic Enlargement)

एनामेव रजायुक्तां वातविभ्यूत्रोपिनिलम्।
प्रत्याश्चिलामिति चवेजज्ञते तित्त्वङ्गुलिताम्।

The same, when associated with pain causes obstruction to the flatus, faeces and urine, is known as pratyaśṭhīlā and it grows obliquely towards the abdomen.

इति सुभूतसिंहिताय निवासस्थाने वातव्याप्तिनिवानं
नाम प्रत्यमोठ्ठ्यायः।

Thus ends the first chapter entitled ‘Diagnosis of Vātika Diseases’ of the Nidāna-sthāna of Suśruta Saṃhitā.
SUGGESTED RESEARCH PROBLEMS

1. Historical and comparative study should be undertaken to find out if the concept of *vāta* (normal and vitiated) is found in other ancient systems of medicine, and if so, then in what way.

2. Attempts could be made to identify the five types of *vātas* (11—20).

3. The different diseases and syndromes due to vitiated *vāta* alone or in association with other *doṣas*, as described in this chapter should be clinically studied and specified (40—91). A common factor in all these diseases etc. which might reflect on the nature and concept of *vāta* might thus be found out.

4. It should be found out in the books of history of medicine about the earliest mention of various diseases and syndromes given in this chapter; wherever applicable, importance of *Susruta*’s writings should be given due recognition.
अर्शसं निदानम्
Diagnosis of Piles

CHAPTER TWO
NIDĀNA STHĀNA
The Diagnosis of Piles

S. S. II. 2.

SUMMARY

1. This chapter deals with the diagnosis of anal piles and of the pile like masses in other parts of the body.

2. Anal piles could be of six types (3). Their aetiology and pathogenesis (4) has been given. Anatomical considerations (5—7) of anus, anal lips, and of the three sphincters have been described. The prodromal and other clinical features (8, 9) of piles in general have been enumerated.

Gross appearance, clinical features and the associated findings in each of the six types of piles have been described (10—15).

Prognosis of piles depending upon their extent (17) and upon other factors as well (23, 24) has been considered.

3. Aetiology, pathogenesis, clinical and other associated features of pile like fleshy excrescences or buds in other parts of the body (male and female genitalia, umbilical region, ears, eyes, nose and mouth) have been given (17).

4. Carmakila (warts) have been specially described and some serious complications mentioned (25, 27).
Now we would expound upon “The Diagnosis of Piles”.¹

As was described by Lord Dhanvantari.

Piles are of six types—due to *vāta*, *pitta*, *kapha*, *sonita* and due to all the *doṣas* together and the hereditary ones.

1. The management of these diseases has been discussed in *S. S. IV. 6*.

2. *Sonita* had not been mentioned as causative agent in many diseases, but one of the few where it has been incriminated is piles.
Now, the various causes as described earlier which excite the *dośas* in those who are not self-possessed and in those who take contradictory foods, eat again before the last meal has been digested, do (excessive) sexual intercourse, (in those who are accustomed to) squatting posture, ride on the back of an animal and inhibit the natural evacuatory reflexes etc., aggravate one, two or all the *dośas* with or without the involvement of *śopita*.

As described earlier, the *dośas* spread, having entered the main artery, go down and having reached the rectum afflict its walls and produce fleshy excrescences specially in the dyspeptic. And by coming into contact with straw, wood, stone, lump (of clay) and clothings etc. or with cold water, the swellings grow in size around; and these are known as piles.

5-7. Anatomical Considerations.

Now the portion just distal to the large bowel for four and a half fingers is known as the anus. There are three sphincters at intervals of one and a half fingers each, known as *pravāhinī, visarjani, and samvarṇī* and are four fingers in diameter. All of them project obliquely for one finger.

And also they are spiral like a conch and are situated one above the other. They have also been described to be of the colour of the palate of an elephant. The anal lips have been
described to be one and a half *yava* (barley) from the end of the hair-line.

Thus the first sphincter is one finger above the anal lips.¹

8, 9. **Clinical Features.**

These would be their prodromal features-dislike for food, difficulty in digestion, sour eructations, burning pain, fullness of abdomen, thirst, tiredness in the legs, meteorism, emaciation, excessive belching, swelling of the eyes, borborygmi, feeling of cutting pain around the anus, suspicion of anaemia, sprue and consumption, cough, asthma, loss of strength, disorientation, drowsiness, sleepiness, and diminished perception of senses.

When (piles) are produced, these very symptoms become evidently manifest.

10. **The Vārika Piles**

According to this description anus extends down to the hair line. The measurements seem to be as follows: starting from the hairline, anal lip is one and a half ‘*yava*’ which is about \(\frac{1}{2}\) finger in extent. The last sphincter extends up to one finger above the anal lip, second and first being further one and half fingers above each, thus making a total of four fingers and a half from the anal margin.
Now, the vāṭika (piles) are dry, reddish or discoloured, irregular in the centre, are like the flowers of kadamba or of the wild cotton plant, are tubular, bud like or are like the point of a needle in appearance. One afflicted by these (piles) defecates painfully and also has pain in the waist, back, sides, penis, rectum and in the umbilical region; abdominal swelling, prostatic and splenic enlargements are produced due to them and the patient’s skin, nails, eyes, teeth, face, urine and stool become blackish.

11. The Paittika Piles.

The piles caused by (vitiating) pitta are blue in their presenting part and are slender, mobile, pale to look at and shine like liver; their shape is like that of a parrots tongue; they are barley (spindle) shaped in the middle, are similar to the mouth of a leech and are moist.

One afflicted by them passes loose motions with blood accompanied with burning sensation. Fever, burning sanation, thirst, and fainting are its complications; and the patient’s skin, nails, eyes, teeth, face, urine and stool become yellow.

12. The Sleśmika Piles.

The piles caused by vāṭita (piles) are dry, reddish or discoloured, irregular in the centre, are like the flowers of kadamba or of the wild cotton plant, are tubular, bud like or are like the point of a needle in appearance. One afflicted by these (piles) defecates painfully and also has pain in the waist, back, sides, penis, rectum and in the umbilical region; abdominal swelling, prostatic and splenic enlargements are produced due to them and the patient’s skin, nails, eyes, teeth, face, urine and stool become blackish.

11. The Paittika Piles.

The piles caused by (vitiating) pitta are blue in their presenting part and are slender, mobile, pale to look at and shine like liver; their shape is like that of a parrots tongue; they are barley (spindle) shaped in the middle, are similar to the mouth of a leech and are moist.

One afflicted by them passes loose motions with blood accompanied with burning sensation. Fever, burning sanation, thirst, and fainting are its complications; and the patient’s skin, nails, eyes, teeth, face, urine and stool become yellow.

12. The Sleśmika Piles.
The piles produced by (vitiating) śleśma are whitish, broad based, fixed, rounded, smooth and yellowish-white; they are like karīra\(^1\) sprout or the kernel of a panasa fruit\(^2\) or are like the teat of a cow. They neither burst nor discharge but cause excessive itching.

One afflicted by them passes copious mucus in their motions which are frequent and look like the washings of meat. Oedema, fever with rigor, dislike for food, indigestion and feeling of heaviness in the head occur due to these; and the patient's skin, nails, eyes, teeth, face, urine and stool become white.

13. Raktaja Piles.

रक्तजाति न्यौधप्ररोहितविद्वृक्षकारणतिकाफलसूङ्ख्यानि पितु-
लक्षणानि ्च, यदा स्वभावगाढ्णपरिभविताः भवन्ति तदास्त्येषं
दुष्टमन्त्रमसूङ्ख सहसा विसृज्जन्ति, तस्य चातिप्रवृत्तो शोणिताति-
योगोपवत् भवन्ति।१३॥

Raktaja piles are like the sprouts of a banyan tree or are like coral or like the fruit of kākaṇantikā and their clinical features resemble those of paittika piles. When they are pressed by the hard stools, excessively vitiated and copious amount of blood is suddenly passed; and complications pertaining to excessive bleeding set in if this continues for long.


सन्निपातजाति सर्वदोषलक्षणयुक्तानि।१४॥

The piles due to vitiation of all the doṣas together are associated with the clinical features of (piles produced by) all the doṣas.

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1. Bamboo sprout.

2. Jack fruit.
The hereditary piles are due to the vitiation of sperm and ovum; they should also be treated according to the *doṣa* involved. Moreover, these are seen with difficulty, are rough, greyish, extremely painful and have their mouth pointing internally. One suffering from these is thin, eats less, has prominent veins over the entire body, has only a few offsprings, oligospermia, feeble voice, irritability, weak digestion and vitality and excessive lethargy; he usually suffers from olfactory diseases and diseases of the head, eyes, nose and ear. The patient always suffers from borborygmi, meteorism, feeling of heaviness in the heart and has no relish for food etc.

16. Prognosis (Based on the Extent of Piles).

The (following verse) has been quoted in this context:

The piles situated in the regions of lower and middle sphincters should be treated by the good doctor; whereas, those situated in the region of upper sphincter should be managed after giving due warning of their bad prognosis.
17. Pile like Fleshy Excrences at Other Parts of the Body (Male and Female Genitalia, Umbilical Region, Mouth, Nose etc.).

Now, the vitiated *doṣas* having reached the penis and having afflicted the muscles and blood produce itching. Then due to itching, ulcers are produced; and in those ulcers vitiated fleshy excrescences\(^1\) with a sero-sanguinous discharge originate; they are like a broom and are situated inside or externally. They definitely damage the penis and destroy the potency also.

And the vitiated *doṣas* having reached the female genitals produce delicate, foul smelling, and umbrella shaped buds\(^2\) with a sero-sanguinous discharge. They definitely destroy the vagina as well as the menstruation.

And the vitiated *doṣas* having reached the umbilical

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1, 2. *Veneral warts or new growths.*
region produce delicate, foul smelling, slimy buds similar to the mouth of earthworms.¹

And those vitiated doṣas having spread upwards may produce pile like lesions in the ears, eyes, nose and mouth². Now, in the ears it produces deafness, earache, and pus discharge; in the eyes it produces inability to open the eyelids, pain, discharge and blindness; in the nose it produces cold, excessive sneezing, difficulty in breathing, pus discharge from the nose, nasal twang in the speech and headache; and in the mouth it causes diseases of the lips, palate and of other parts, indistinct speech, loss of taste and other diseases of the oral cavity.

18-21 Warts.

व्यानस्तु प्रकृतिः श्लेष्माणं परिगृह्ये बहि शिष्ठरणि कोलबद्रासी निर्विन्तिति तानि चर्मकोलान्यशासीत्याच्छले।।

भवल्ल चात्र—

तेषु कोलेभु निस्तोद्रो मार्तेनोपजायते।।
श्लेष्मणा तु सवर्णत्वं प्रस्थित्वं च विनिर्दिशेत।।
पित्तशोणितं रौक्षं क्रृत्तत्वं हल्कणता तथा।।
समुदीर्घत्वतं च चर्मकोलस्य लक्षणम्।।
अशासिस्त लक्षणं व्यासादुतं सामायतस्तु यत्।।
तत्सौ प्राविनिर्दिष्टात्साधयेऽवृष्ण्यां चरः।।

The vitiated vyāna vāyu in association with kapha produces firm and nail shaped piles externally; they are known as carmakīla piles (warts).

The following verses have been quoted in this context:

In those warts pain is produced due to the vāyu; and it is said that the colour and nodularity are due to ślesmā.

1. Umbilical granuloma.
2. Polypi e. g. nasal polypus.
Whereas *pitta* and *švita* produce dryness, blackness, glossiness and excessive roughness over the entire surface of the *carmakila*.

Thus, these are the clinical features of piles in general discoursed in detail. All these piles should be managed by a good doctor in the way described earlier.

22. Samsarga Piles (Mixed).

अर्थसु दृष्यते रूपं यदा बोध्यतः तु ||
संसर्गः ते विजानीयात् संसर्गः स च पद्धतिः ||२२॥

When features of two *doṣas* are seen together in a pile, it should be known as a *samsarga* pile; and those *sāmarga* piles are of six types.

23, 24. Further Considerations on the Prognosis of Piles.

त्रिभोषणयत्य्ललिन्यदानिः यायायानि तु विनिवेदिते ||
हन्दजिनी द्वितीयायां बलो यायाधिनितानि च ||२३॥
कुचछसायायानि तान्याहुः परिसंवत्सराणि च ||
सतियपतसयायानि सहजानि तु वर्जयेत ||२४॥

(Piles) produced by the three *doṣas* seperately as well as those having minor symptoms only, should be considered palliable. Those (piles) produced by a combination of two *doṣas* or those situated in the region of the middle sphincter and those of more than one year’s duration have been said to be curable with difficulty. Those (piles) produced by all the *doṣas* together and the hereditary ones should be discarded (from treatment as incurable).

25, 26. The Serious Complications of Piles.

सर्वं: स्तुवर्त्यो येषाः दुर्नाममिभवतुः ||
तैस्यु प्रतिहतो वायुपान: सतियपिते ||२५॥
ततो व्यानेन सत्कम्य ज्योतिर्मूर्वांगति वेदिनाम् ||२६॥
Those in whom all the sphincters are affected by the (notorious) piles, the *apāna vāyu* gets obstructed and it does not come out; then, in association with *vāyu* (*vyāna*) it weakens the metabolic fire\(^1\) in the human being.

Thus ends the second chapter entitled 'The Diagnosis of Piles' of *Nidāna-sthāna* of *Suśruta Samhitā*.

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1. *The word for metabolic fire used at other places has been agni. Here the word *jyoti* has been used in the sense of *paṅcātmaka agni*, i.e. five fold metabolic fire.*
SUGGESTED RESEARCH PROBLEMS

I. HISTORICAL

Historical study should be done to find out the first available description of the following:

1. Anal Piles (3—16).
2. Anatomy of anus, anal lips, and of the three sphincters (5—7).
3. Veneral warts on male and female genitalia (17).
4. New growths on male and female genitalia (17).
5. Umbilical granuloma (17).
6. Polypus in nose, ears, eyes and elsewhere (17).

II. COMPARATIVE

1. A comparative study of the descriptions of various types of piles (10-15) should be done.
2. Similar study regarding the venereal warts and new growths of male and female genitalia, umbilical granuloma and nasal and other polypi could be carried out.

III. CLINICAL

A clinical and experimental study on the hereditary predisposition or occult congenital presence of piles could be done (15).
निदान स्थानम्
तृतीयोद्वयायः

अज्ञरीणां निदानम्
Diagnosis of Urinary Calculi

CHAPTER THREE
NIDĀNA STHĀNA
SUMMARY

This chapter deals with the formation and diagnostic considerations of urinary calculi, urinary gravel and seminal concretions.

Four types of urinary calculi have been described (3). Their aetiology (4) and premonitory symptoms (5, 6) have been given. Clinical features (7) of vesical calculi have been described with precision.

Pathogenesis, symptomatology and gross appearance of calculi corresponding to phosphate (8), uric acid and urate (9), oxalate stones (10) and seminal concretions (12) (termed ślesmika, paittika and vātika stones and sukrāsmaris respectively) have been described. First three occur usually in children and the last one forms in adults (11).

Pathogenesis, gross appearance, clinical features and complications of urinary gravel have been given (13 to 16/1).

Certain anatomical (18 to 20/1) and physiological (20/1 to 24/1) aspects of urinary bladder in relation to stones have been considered.

Āyurvedika concept of the mode of formation (24/2 to 27/1) of urinary calculi in general have been given. Effects on urinary bladder of normal vāta and when it becomes abnormal (27/2 to 28) have been considered.
Chapter Three

1. अध्यात्मिकर्षणं निवानं व्याध्यात्मां: ||११||

Now we would expound upon "The Diagnosis of Urinary Calculi".¹

2. योऽवाच भगवान् चन्वन्ति: ||२१||

As was described by Lord Dhanvantari.

3. Types of Urinary Calculi (Aśmari).

चत्वारोऽस्मयं भवति, श्लेष्माधिष्ठाना:, तद्वा—श्लेष्मणा, बातेन, पित्तेन, शुक्रेन चेलत। ||३१||

The urinary calculi are of four types. Śleṣmā is the basis of all.

They are as follows: those caused by śleṣmā, vāta, pitta and sukrā.


तत्रासंशोधनशीलस्यापथ्यकारणः प्रकृपितं श्लेष्मा मूत्र-संपृक्तोऽप्रविध्य सत्तिमदमरी जनयति। ||४१||

Now, in those who do not observe proper cleansing procedures² and in those who are indiscrete regarding their

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1. The management of these diseases has been discussed in S. S. IV. 7.

2. Emesis, purgation, enemata, errhines and blood-letting.
dietary habits, the śleṣmā gets aggravated and mixed with urine enters the urinary bladder and therein it produces calculi.

5,6. Premonitory Symptoms.

The premonitory symptoms of urinary calculi are fever, pain in the bladder region, dislike for food, dysuria, pain in the region of bladder neck, scrotum and penis, exhaustion due to pain and goat like smell in the urine.

During the prodromal stage of urinary calculi the patient passes urine with difficulty, which is viscid, turbid, and has characteristic pains and colours of the vitiated doṣas.

7. Clinical Features of Vesical Calculi.

Now, when (calculi have) formed, pain during micturition occurs in any of these regions—the umbilical region, bladder, perineal raphe and penis and there is obstruction to the flow of urine, haematuria, scattering of the urinary stream, and passage of turbid, sandy urine shining like gomeda gem.

1. Dietary factors are even today regarded important aetiological factors of urinary calculi.

2. A gem brought from the Himalayas and the Indus (being of 4 sorts, white, pale yellow, red and dark blue) M. W. p. 366, Col. 2.
Its pain is felt during running, jumping,\textsuperscript{1} riding and during walking in the sun and for long distances.

8. The Śleṣmika Stones (Phosphate Calculi)\textsuperscript{2}.

\textit{तत्र श्लेष्मादामरी श्लेष्मलम्प्रमयस्यवहुतोत्स्त्यांह्युप्लिप्यादः परिवृत्तः प्राप्य वस्तिमुखमिठ्ठाय चातो निर्णयद्विः, तस्य मूत्र-प्रतिघाताद्वृत्ते भिन्नते नित्तुढ़त हि च बस्तिगुहः शोतरूपः भवति, अतेऽरं चात्र त्वेवा स्निग्ध सहती कुक्कुटाण्डप्रतीकाशा मधुकुप्पथ्वाणै वा भवति, तत्र श्लेष्मकीमिति विद्यात्।।8।।}

Now the śleṣmika stones are produced due to the excessive intake of śleṣma generating foods, and increase in size around due to a further deposition of śleṣma. Being located in the bladder neck they obstruct the passage. Due to the obstruc-tion to the flow of urine, cutting, incising or pricking pain, heaviness and sensation of cold is felt in the region. This type of stone is white, slimy and big like a hen’s egg or else has the colours of madhūka flowers; these are known as śleṣmika (calculi).

9. The Paiṭṭika Stones (Uric Acid and Urate Calculi).

\textit{पित्युत्तलस्य श्लेष्मसंधातमुपगम्य यथोक्तः परिवृत्तः प्राप्य वस्तिमुखमिठ्ठाय लोतो निर्णयद्वि, तस्य मूत्रप्रतिघाताद्वृत्ते चौथष्ठे वहते पच्छ्यै इत्य बस्तिहुण्डावृत्तश भवति; अतेऽरं चात्र सरक्ता पोतावभासा कुःणा मध्यात्मकालस्यप्रतिमा मधुमर्कै वा भवति, तत्र पैतिकीमिति विद्यात्।।9।।}

\textsuperscript{1} The role of running and jumping which cause an aggravation of pain was used as a clinical confirmatory test in the diagnosis of stones till the recent past.

\textsuperscript{2} The modern terms e.g. phosphate, uric acid and urate calculi etc. have been suggested considering the gross appearance of the stone described in the text.
The ślesmā alongwith pitta gets solidified and increases in size around as described earlier, and when located in the bladder neck region obstructs the passage. Due to obstruction to the flow of urine, warmth, sucking, burning or throbbing sensation is felt in the bladder region and upa vāta occurs. This type of stone is blood stained, yellowish in appearance or black, is like the kernel of bhallātaka fruit or else has the colour of honey. These are known as the paitika (calculi).

10. The Vātika Stones (Oxalate Calculi).

The ślesma alongwith vāta gets solidified and increases in size around as described earlier and when located in the bladder neck obstructs the passage. Due to obstruction to the flow of his urine severe pain takes place; then, due to the excessive pain (the patient) gnashes his teeth, squeezes the umbilical region, rubs the penis, touches the perineum and he cries out in agony, feels a burning sensation and passes flatus, urine and stool with difficulty while straining for micturition. This type of stone is blackish, hard, irregular and rough and is full of spikes like the flowers of kadamba. These are known as the vātika (calculi).

1. Acute cystourethritis. S. S. VI. 58.22 and 23 may be referred to for description of this disease.
11. Age in Relation to Stones.

Often all these types of stones are formed in children specially because of their indulgence in day sleep, consumption of all sorts of food, eating before the previous meal has been digested and because of their liking for cold, bland, heavy and sweet dishes. Because of the small size of the bladder in them and because of its thin musculature (the stones) can be easily caught hold of and taken out.

And in adults, the seminal concretions form due to sukra.

12. Seminal Concretions (Śukrāśmari).

Due to interruption of sexual intercourse, or due to excessive sexual intercourse, the semen gets displaced but does not come out and is diverted into the wrong tract. Vāyu then gets (the displaced semen) together and deposits it between the penis and both the testes and after that it dries it up. This obstructs the urethra and dysuria, pain in the bladder and swelling in both the testes are brought about. It disappears by just a pressure in that very region. These are known as śukrāśmaris (seminal concretions).

13-16/1. Clinical Features of Śarkara (Gravel).
These verses are quoted in this context.

Gravel, sand or ash like substances in the urine are the altered appearances of urinary calculi. Gravel and urinary calculi are known to have similar features alongwith pain.

When the vāyu is favourable and specially when the calculi are small, they (the stones) come out. However, the same (calculi) when disrupted by the local vāyu are known as gravel.

Pain in the precordium, weakness of lower limbs, pain in the flanks and shivering, thirst, upgoing vāyu, blackish discolouration, weakness, pale appearance of the body, dislike for food and indigestion: these occur in patients suffering from sarkarā (gravel) disease.

16/2, 17. Complications Produced by Gravel.

Those (gravel) get stuck up on their passage through the urethra and produce complications such as weakness, lethargy, emaciation, pain in the flanks, dislike for food, pallor, uśna-vātā (cysto-urethritis), thirst, pain in the precordium and vomiting.
18-20/1. Anatomical Considerations of Urinary Bladder.

The urinary bladder lies between the umbilicus, back, waist, testes, rectum, groin and penis, is thin-walled and has a single outlet directed downwards.

The bladder, as also the bladder neck, the penis, both testes and rectum are all related to each other and are situated in the space in front of the bone of the rectum (sacrum).

(The bladder) is shaped like a gourd and is fixed on all sides by the veins and ligaments.

20/2-24/1. Physiological Considerations of Urinary Bladder.

This (urinary bladder) is a site for collection of urine,
a base for the mala,¹ and is foremost amongst those organs which sustain life.

The urine carrying channels originating from the pakvāśaya (intestines) always fill (the bladder) with urine in the same way as the rivers (constantly) fill the sea.

Their mouths or openings are in thousands and because of their being extremely minute, are not seen.

That (bladder) gets filled up with urine by percolation having been carried there by channels, from the āmāśaya² (stomach) during waking as well as sleep.

As a new pitcher sunk into water upto its mouth fills up from the sides, similarly bladder gets filled up by the urine.

24/2-27/2. Pathogenesis of Calculi Formation.

एवमेव प्रवेशन वातः पितं ककोडस्रि वा ॥ २४॥

मूत्रयुक्तमुपस्तनहात् प्रविष्टं कुस्तेदस्मरीम् ॥

अप्सु स्वच्छा (स्था) स्वपि यथा निशिवताः नवे घटे ॥ २५॥

कालान्तरेण पद्धः स्वादस्रीसंभवस्थ्या ॥

संहन्त्यापो यथा विव्या मास्तोपनिश्च बैशुः ॥ २६॥

1. The food after digestion gets converted into two parts—the prasāda bhāga and the mala bhāga. Former is absorbed as the product of digestion and is assimilated in the metabolic pathways of the human system. The mala bhāga has been accepted in Āyurveda to be equally important and is retained in the body for sometime before being finally excreted out. The places where mala is retained are known as maladharās; they are the urinary bladder and the rectum, both being essential for life.

2. According to Āyurveda, sources of origin of urine are stomach and intestines. At these places, the food gets separated into prasāda bhāga and mala bhāga by the action of pācaka pitta and samāna vāyu. The mala bhāga gets converted into faeces and urine.
Similarly, vāta, pitta and/or kapha enter the bladder and after mixing with urine because of their adhesiveness form the calculi.

As even clean water kept in a new pitcher, gets muddy in due course of time—in a similar way calculi are formed.

As air and fire of the electricity in the sky consolidate water (to form hail storms), similarly pitta located in the bladder in conjunction with vāyu consolidates kapha (to form calculi).


When vāyu is functioning normally in the bladder, urine is properly discharged; on its becoming abnormal various complications such as retention of urine, urinary abnormalities and spermatic disorders, or some other urinary diseases occur in the bladder itself.

Thus ends the third chapter entitled “The Diagnosis of Urinary Calculi” of the Nidāna-sthāna of Susruta Saṃhitā.
SUGGESTED RESEARCH PROBLEMS

I. HISTORICAL

Historical aspects of the following should be studied to find out as to who described them first:

1. Urinary Calculi; Their recognition, aetiology,
2. Seminal Concretions; pathogenesis, clinical
3. Urinary gravel; features and complications.
4. Anatomy of Urinary Bladder;
5. Physiology of urine formation, collection and discharge.

II. COMPARATIVE

1. Comparative study of different systems of other ancient medicines with Ayurveda and with modern medicine should be done on the three main types of urinary calculi and seminal concretions and urinary gravel.

2. Study should be made if the dosa concept of formation of stone was present in other systems of medicine also or not.

III CLINICAL

Cases of stone in the urinary bladder should be studied to see if the list of symptoms and complications mentioned in this chapter could be used to diagnose the type of urinary calculi preoperatively.

IV. EXPERIMENTAL

1. Attempts should be made to produce experimentally the different types of vesical calculi using the concept of their formation as mentioned in this chapter.

2. Attempt could be made to produce seminal concretions and urinary gravel in a similar way in experimental animals.
CHAPTER FOUR
NIDĀNA STHĀNA
Diagnosis of Fistula-in-ano

S.S.II.4

SUMMARY

This chapter describes the aetiology, pathogenesis, diagnosis and prognosis of fistulae-in-ano and differentiates them from anorectal abscesses and perianal boils.

Five types (3) of fistula-in-ano have been described viz. šalaponaka, uṣṭragrīva, parisrāvi, śambūkāvarta and unmārgī. Etymology (3) of the word bhagandara (fistula-in-ano) has been given. It was to be differentiated from its precursor, bhagandara pīḍakā, and anorectal abscess (3). Their prodromal features in general have been mentioned (4, 12).

The aetiology, pathogenesis, clinical features, nature of discharge and of pain and the sequelae and complications of all the types of fistula-in-ano have been given in detail (5–9).

Differentiation between perianal boil, anorectal abscess and fistula-in-ano has been emphasized (10, 11).

Prognosis of the different types of fistula-in-ano has been mentioned (13).
Chapter Four

1. अथातो भगन्दराणां निवानं व्याह्यास्याम: II.11

Now we would expound upon "The Diagnosis of Fistulae-in-ano."¹

2. यथोबाच भगवान् धन्वन्तरिः II.12

As was described by Lord Dhanvantari.

3. Aetiology and Types

बातपित्तश्चितसाधियातागलन्तनिमित्ताः. शातपोषकोष्टीप्रोवरिष्टा-
विशंबृकावतोमार्गिणो यथासंह्यं पठौः भगन्दरा भवति। ते तु
भगुद्ववस्तिप्रदेशारणाच्छ भगन्दरा' इत्युच्यते। अभिज्ञा: पिडका:
भिष्नास्तु भगन्दरा: II.13

The fistulae-in-ano are of five types-सतापनका, उष्ट्राग्रिवा,
पारिस्रावी, संबुक्कावर्ता and unmārgi; they are caused by vāta,
pitta and kapha, by a combination of the three doṣas and by trauma
respectively. These are called fistulae-in-ano (bhagandara) because
they break through the perineum (bhaga), anus and bladder
regions. Those without an opening are called (anorectal)
abscesses³ and those with an opening are called fistule-in-ano.³

---

1. The management of these diseases has been discussed in
S.S.IV.8.

2. Bhagandara-पिडका.

4. **Prodromal Features**

Their prodromal features are pain in the waist, itching, burning sensation and swelling at the anus.

5. **Śatapanaṇa Fistula-in-ano**

Now, due to indulgence in unsalutary diets and habits, the *vāyu* gets vitiated, condensed and then localised one to two fingers around the anus and involves the muscles and blood, gives rise to specific types of pain like pins and needles etc. and if it remains untreated, suppuration results (anorectal abscess).

Due to its close proximity to the urinary bladder, the wound is always moist and is full of multiple small holes like that in a sieve\(^1\); from those minute holes copious, clear or foamy discharge flows out continuously and there is whipping, tearing, biting and pricking pain in the wound and there is also splitting sensation of the anus. If neglected, flatus, urine, faeces and

---

1. *watering can perineum.*
Diagnosis of Fistula-in-ano

semen start coming out of those openings; such a fistula is called *sataponaka*.

6. **Uṣṭragrīva Fistula-in-ano**

पितां तु प्रकुपितमनिलेनाथः प्रीतिः पूर्ववबैश्यतं रक्ततां तन्वीमुच्छ्या चिद्यामुद्धर्यावाकारां पिडकां जनयति; सास्य चोषावीदौ वेदनाविशालाजनयति; अप्रतिक्रियमाणा च पाकमष्ट्यति; ब्रणचारिन्यार्यां स्नामिव वहन्ते, वुर्गन्धुमुण्डानामां स्वतः, उपेक्षितदः वातमृत्रपुरीषरूपां रेताः विसृज्जति; तं भगन्द्रमुद्धर्याविचारयाचक्षते।

Vitiated *pitta* is pushed down by the *vāyu* and accumulates as described before around the anus and produces a red coloured, small and raised inflamed swelling of the shape of a camel’s neck; it gives rise to specific burning type of pains etc. in it; and if untreated, suppuration results. The resulting wound gives rise to sensation as if burnt by alkali or fire cautery and there is foul smelling and warm discharge; if neglected, flatus, urine, faeces and semen are discharged (through it) and that fistula is called *uṣṭragrīva*.

7. **Parisṛāvī Fistula-in-ano**

श्लेष्मा तु प्रकुपितः समीरणेनाथः प्रीतिः पूर्ववबैश्यतः श्लेष्मावभासां स्त्यां कुण्डमतीं पिडकां जनयति; सास्य कुण्डवादीन्न वेदनाविशालाजनयति, अप्रतिक्रियमाणा च पाकमष्ट्यति, ब्रणचारिकमवां संरन्भो कुण्ड्रापार्यां पिच्छिलमजस्मालां स्वतः, उपेक्षितदः वात मृत्रपुरीषरेताः विसृज्जति; तं भगन्द्रं परिश्राविचारयाचक्षते।

The vitiated *kapha*, is pushed down by the *vāyu* and accumulates, as described before, around the anus and produces a white coloured, firm and itching swelling; it gives rise to specific pains like itching etc. If untreated, suppuration results and the resulting wound is indurated, angry looking and usually itching and a continuous mucoid discharge flows from it. If neglected
flatus, urine, faeces and semen are discharged from it; that fistula is called as *parisrāvi*.

8. Sambūkāvarta Fistula-in-ano

The vitiated *vāyu*, in close association with the vitiated *pitta* and *kapha*, travels down, and accumulates as described before around the anus and produces a swelling of the size of the tip of the great toe of the foot; it has the clinical features of all the *doṣas* and gives rise to specific pains, like pricking, burning sensation and itching etc. If untreated, suppuration results and the resulting wound has a discharge of various colours; its specific pains are (deep seated and directed inwards) like whirlpools in a full river or the revolutions in a conch-shell; that fistula is called *sambūkāvarta*.

9. Unmārgi Fistula-in-ano

When a bony foreign body is taken with food by an unaware and meat-greedy person, it is pushed down with solid stools by *āpāna vāyu* and arrives in the anus abnormally and traumatizes it; due to this injury putrefaction results. Organisms grow in
the resulting wound and in the dead tissues full of pus and blood as they would grow in a soil full of stagnating water. These (organisms) while eating away the anus tear it from many sides. Then from the passages thus created by the organisms flatus urine, faeces and semen are discharged; that fistula is called unmārgī.

10. Guda-piḍakā (perianal Boil)

The following verses are quoted in this context:

A swelling in the anal region, which has mild pain and subsides quickly is known as piḍakā; and it is different from bhagandara-piḍakā.

11. Bhagandara-piḍakā (Ano-rectal abscess)

A swelling occurring within two fingers around the anus, which is deep rooted and is accompanied with pain and fever is known as bhagandara-piḍakā as opposed to the piḍakā mentioned above.

12. Prodromal Features of Fistula-in-ano

1. S.S. II. 4. 10 and 11 describe two types of swellings around the anus. Piḍakā alone implies a perianal boil while bhagandara piḍakā implies ano-rectal abscesses.
Itching, pain, burning sensation and inflammation occurring in the anal region after riding on a vehicle and after defaecation are the prodromal features of fistula-in-ano.

13. Prognosis of Fistula-in-ano

\[
\text{घोरा: साध्वितं दुःखा: सर्वं एव भगन्धरा:।}
\text{तेर्पिसाध्वित्रित्रकावपत्य: क्षतजलच भगन्धर:।।११३।।}
\]

All the fistulae are very difficult to treat; out of them the fistulae produced by a combination of the three doṣas i.e. sambūkāvarta and the traumatic ones (unmārgī) are incurable.

\[
\text{इति सृष्टसंहितायं निवासस्थाने भगन्धरलिबानं}
\text{नाम चतुर्योध्यायं।।४।।}
\]

Thus ends the fourth chapter entitled “The Diagnosis of Fistula-in-ano” of the Nidāna-Sthāna of Suśruta Samhitā.
SUGGESTED RESEARCH PROBLEMS

HISTORICAL

Study should be made to find out the first precise description of fistula-in-ano and if anyone else before Suśruta has differentiated those from anorectal abscess and perianal boil (10, 11).

COMPARATIVE

A comparative study of the five types (3–13) of fistula-in-ano mentioned in this chapter should be carried out between ancient Indian and other ancient systems of medicine and between them and the modern concepts.

CLINICAL

Study of patients suffering from fistula-in-ano should be done to find out if the five types (3–13) mentioned in this chapter could be used for classification of fistula-in-ano today.

EXPERIMENTAL

Attempts could be made to produce the five types (3–9) of fistula-in-ano in experimental animals.
CHAPTER FIVE
NIDĀNA-STHĀNA
This chapter deals with the etiology, pathogenesis, clinical features and complications of various skin diseases including leprosy. Excessive or loss of sweating, loss of sensation and unhealing ulcers have been significantly described among the common clinical features indicating thereby that leprosy was included in the diseases mentioned (4). Further, amongst its etiological factors infection by organisms has also been described in addition to the various doṣas (5, 7).

Seven major types of kuṣṭhas have been described (8); one due to vāta, four due to pitta and two due to kapha. Eleven minor types of kuṣṭhas (9–15) and three types of leucodermaṣ (17) have been described. The description includes various allergic, inflammatory and idiopathic lesions of the skin. The gravity and poor prognosis of the various types have been emphasized. Modes of spread of contagious diseases have been succinctly mentioned (34).
Chapter Five

1. अथात इक्षुनिमान व्याक्यास्तःः: 111
   Now we would expound upon "The Diagnosis of Skin Diseases (including Leprosy)." 1

2. यज्ञवल्क भगवान् पञ्चवतिरिः 112
   As was described by Lord Dhanvantari.

3. Predisposing factors, Aetiology and Pathogenesis
   मिथ्याधराचारयः विशेषाद्भुतविद्वाचारयोक्तिणिः
   सन्तोषस्वात्मकतयो व्यायामप्रायम्यचर्माधिकरितोऽप्राप्तानुपवुद्रकप्रार्थानि
   वा पवसारभीष्यमिनतो यो वा महज्ज्यसूक्ष्मामृहितपत्रः सहस्राष्ट्रं वा
   प्रतिविशिष्टो, तस्य पितविषाणीनि प्रकुपितो परिपाणिनि: प्रबुद्धतिर्यंगा: पिरी
   सिरा: संप्रस्फूर्त समुद्रवाहिन् मां यत् प्रति समन्तहृदिक्षिप्त, यत्र तत्र च
   दोषो विशिष्टो निहारित्त तत्र तत्र मण्डलानि प्राक्कुल्यमण्डलानि, एवं समु
   'त्यात्मात्मस्य वस्त्रास्त्रत्र तत्र च परिपाणिनि प्राप्तार्थिक्यमानोद्वितियां
   प्रतिफल्पृते पारमानंदविधियायन् 11311

Irregularity in diet or in daily routine; taking of specially heavy, contraindicated, unsuitable foods; taking meals before the previous meal has been digested or taking of unwholesome (foods); indulgence in exercise or in sexual intercourse after

1. The management of these diseases has been discussed in S. S. IV. 9.

2. Many of the etiological factors mentioned cannot explain the etiology of leprosy and skin diseases in general. However, it is now well known that cutaneous allergy is most often due to ingestants.
ingesting fatty foods or after having undergone emesis; taking of milk along with the meats of domestic, swamp and aquatic animals; taking of bath habitually while still feeling hot (after exposure to the sun or after physical exertion) and forcible inhibition of vomiting; all these vitiate pitta and kapha which get mixed up with vāyu, and getting aggravated traverse the oblique veins, involve the external passages and flare up around.

Patches become manifest at those very places wherever the flared up doṣas reach; the doṣas thus afflicting the skin increase at these very places, if left untreated; and when they reach internally they vitiate the dhātu.

4. Prodromal Features

तत्त्व पूर्वस्वरुपणि—स्वेक्षणार्थमकस्मादश्रद्धाः। कण्डूः स्वेदावृत्तम्—
मस्तवेदने वासुद्रवर्षणं स्वापः क्षतिविस्फोटमस्वाजः कः घातता चेति॥४॥

Their prodromal features are roughness of skin, sudden horripilation, itching, excessive sweating or absence of sweating, loss of sensation in the limbs, increase in the size of wounds (inspite of treatment) and blackish discoloration of the blood.

5. Types of Kuṣṭhas

तत्र सप्त महाकुष्ठानि, एकादश शूद्रकुष्ठानि, एवमण्डवशं
कुष्ठानि भवति। तत्र महाकुष्ठान्यत्र जड्वरस्तिः (क्ष) जिह्वकपलीकाकाकण्यमुण्डरकोकुष्ठानीति। शूद्रकुष्ठान्यपि स्वूलास्यं महाकुष्ठाने
मेकुष्ठं चर्मदलं विसर्गं परिसर्गं: सिद्धं विचाराचका किंतु (सं)
पामा रक्षा चेति॥५॥

1. The term kuṣṭha has been popularly used for leprosy but studying the description in light of modern knowledge, it appears that many of these do not fit in with leprosy but in fact are nearer to many other skin diseases. So this term should be used for “Dermatoses (including leprosy).”
There are seven major kuṣṭhas and eleven minor kuṣṭhas; thus there are eighteen kuṣṭhas in all.

The major kuṣṭhas are aruṇa, audumbara, ṛṣyajihva, kapāla, kākanaka, punḍarika and dadru.

The minor kuṣṭhas are sthīlāruṣka, mahākuṣṭha, ekakuṣṭha, carmadala, visarpa, parisarpa, sidhma, vicarciṅa, kīṭibha, pāmā and rakasā.

6.7. Doṣa as the Basis of Nomenclature and Prognosis of Major Kuṣṭha

All the kuṣṭhas are due to the vitiation of vāta, pitta, and kapha and due to organisms. The nomenclature is done according to the predominance of the doṣas concerned.

Out of them aruṇa is due to vāta; audumbara, ṛṣyajihva, kapāla and kākanaka are due to pitta and punḍarika and dadru are due to kapha. The significance of this order is because of the increasing difficulty in their management, their ability to involve the dhātus successively and their increasing incurability.

8. Clinical Features of Mahākuṣṭhas

Tattra bātāneśānaṃ bhumīni visārjanīto vābdhesvānyavatātātāvākāryakāryaṃ, ṛṣṭhy (kṣa) - jihvā-prakāśaṃ kārayaṃ ṛṣṭhy (kṣa) jihvāṇaṁ, rāṣṭhyapātākāśaṃ kāpala kūṭānaṁ, kākārājīntakāśaṃ rāṣṭhyakāśaṃ; teṣāṃ ṛṣṭhyānāhāprio ṛṣṭhyānāhāprio kākārājānmāṇāḥ śāntaḥ jāyānuṣṭhānamahāvāmānaṁ kākārājānāṁ; kākārājānti-cīndhaśyānti kākārājānti kākārājānti.
Vātika Mahākuṣṭha

(1) Aruṇa—Out of these, the aruṇa kuṣṭha caused by vāta, is reddish in appearance, thin and has a tendency to spread and is associated with pricking and tearing pains and with loss of sensations.

Paittika Mahākuṣṭhas

(2) Audumbaramahākuṣṭhas—The audumbara mahākuṣṭhas caused by pitta are of similar colour and sizes as the ripe audumbara fruits.

(3) Rṣyajihva—The rṣyajihva kuṣṭhas are similar in appearance and roughness to that of the tongue of rṣya deers.

(4) Kapālakuṣṭha—The kapālakuṣṭhas are like black clay pot in appearance.

(5) Kākanaka—The kākanaka kuṣṭhas are extremely black and red in colour like the fruits of kākanāntikā.

The general features of all these four are warmth, sucking and burning sensations, smoky sensation, quick appearance, suppuration, bursting and growth of organisms in them.

Śleṣmika-Kuṣṭhas

(6) The punḍarika kuṣṭha—The punḍarika kuṣṭhas caused by śleṣma are like the leaves of white lotus.

(7) Dadru kuṣṭha—The dadru kuṣṭhas have the colouration of the flowers of linseed, or are copper coloured, and are serpigenous and full of eruptions.

1. This could fit in with tuberculous leprosy.
2. This group probably represents pyoderma.
3 & 4. May be considered psoriasis and ringworm respectively. Psoriasis patient very often complains of itching which may be marked.
The general features of both these are elevated, spherical, itching and slowly growing patches.

9. Clinical Features of Kṣudrakuṣṭhas

क्षुद्रकुष्ठायत ऋत्वे बक्ष्यामः—
स्थूलानि सन्धिहवतिवाहनानि स्थूलाशिब स्यूऽ कठिनायसहिष्य।
त्वक्कोचमेवस्वपनास्त्रावः कुष्ठे महत्त्वायते भवति ||१९१||

Now we would describe the minor kuṣṭhas.

(1) Sthūlāruska¹

There are hard and thick ulcers in the joints and are difficult to treat in cases of sthūlāruska kuṣṭhas.

(2) Mahākuṣṭha²

Appearance of wrinkles, cracks and anaesthesia in the skin and lethargy occur in mahākuṣṭha.

10/1.

(3) Ekakuṣṭha³

कुष्ठाशं येन स्वाच्छांसरौं तद्वेकुष्ठं प्रवर्तति कुष्ठम्।

That kuṣṭha in which the body becomes blackish-red is known as ekakuṣṭha.

10/2.

(4) Garmandala⁴

स्थूलेऽन कण्ठूव्यथनोषोषोषत्तलेषु तत्त्वमेतलं विविधं ||१०१४||

1. Ezematous patches occurring in flexures in atopic dermatitis are often hard and itchy and become painful only when eroded or secondarily infected.

2. Presence of anaesthesia indicates it to be a type of leprosy. The presence of cracks (probably in feet) indicates that it might be a polynervitic type of leprosy.

3. These might represent melanodermas.

4. This description tallies with dyshiderosis (cheiropedo-pompholyx).
That kūṣṭha in which there is itching, pain, warmth and sucking sensation in the palms and soles is called carmadala.

11. (5) Visarpa Kūṣṭha

विसर्पवत् सप्ति सध्वतो यत्वग्रहतमासांत्विध्यमृत्यु शीघ्रः।
मूल्यमावहारतियतिवालकाः कुल्वा विसर्पः स भवेद्विकारः। ॥ ११॥

That kūṣṭha is visarpa which having afflicted the skin, blood, and muscles quickly spreads all over like erysipelas and which produces unconsciousness, burning, restlessness, pricking pain and suppuration.

12/1. (6) Parisarpa Kūṣṭha

शान्तः शारीरे पिडकः सङ्कल्पः सप्तिः वायस्तं परिसर्पमाहः।

That is called parisarpa in which discharging boils gradually spread over the body.

12/2. (7) Sidhma Kūṣṭha

कण्डुवन्वतिः स्वेतमपायिः सिध्म विद्धात्तु व्रयशः उत्तर्कायेः। ॥ २१॥

That should be known as sidhma kūṣṭha which has itching, is whitish, painless and thin and usually occurs in the upper half of the body.

13. (8) Vicarcikā Kūṣṭha

राज्योपजकण्डुवतिः सहस्त्रा भवति गात्रेषु विचारचक्कायाम्।
कण्डूमती द्राहस्तोपनमा व्रिपाविका पादगतेयमेव। ॥ ३२॥

1. Erysipelas.
2. Probably it is furunculosis.
3. Description is nearest to pityriasis versicolor, but itching is present only in about a quarter patients.
4. This probably represents ichthyosis, even though normally ichthyotic patients do not itch or have pain unless it is severe, and is eczematised, which is a common complication.
Cracks, excessive itching, severe pain along with roughness in the body are present in *vicarcikā kuṣṭha*. The same occurring in the foot only with itching, burning and pain is called *vipādikā*.¹

14/1.  
(9) Kiṭibha Kuṣṭha²

यत् ब्राह्म वृत्त घनमुग्रकंकु तत् सिनगधकण्णं किटिंभ (मं) वदति।

That is known as *kiṭibha kuṣṭha* in which the patches are discharging, circular, dense, severely itching, slimy and blackish.

14/2.  
(10) Pāmā Kuṣṭha³

सालाकण्डपरिवाहकाभि: पामाणुकाभि: पिडकाभिलिन्हा।।१४॥

*Pāmā kuṣṭha* is associated with discharge, itching and burning, and with the appearance of tiny boils.

15/1.  
Kacchū Kuṣṭha⁴

स्थोते सवाहरित सेव कच्छू: स्फूक्याणिपादभवनिलिह्या।

And that (*pāmā*) in which blisters with burning pain are produced in the buttocks, hands and feet is called *kacchū kuṣṭha*.

15/2.  
(11) Rakasā Kuṣṭha⁵

कण्डवन्विता या पिडका शरीरे सलावहीता रकसोच्यते सा।।१५॥

1. *Vipādikā* may represent *tylosis*, but later can involve *palms* also.

2. *This may represent some varieties of dermatitis* (*eczema*).

3. *The description given could probably have been of acute stages of eczema and moniliasis.*

4. *A subvariety of pāmā kuṣṭha.*

5. *Scabies.*
That is called rakṣā kūṣṭha in which there is itching in the body and boils are present without any discharge.

16. Doṣas as the Aetiological Basis of Minor Kuṣṭhas

न तसिध्यम रक्षा महुच्च चण्डकुण्ठत कफजान्यमुनि न।

daivyā: प्रकोपात् परिसर्पसंक शोषण मित्रभवाणि विद्यात् ॥१६॥

Sthūlāruṣṭa, sidhma, rakṣā, mahākuṣṭha, and ekakuṣṭha are produced by kapha.

Parisarpā is the only one produced by the vitiation of vāyu; the rest are known to be due to vitiation of the pitta.

17. Leucoderma (Kilāsa)

किलासमपि कुठ्ठविकल्प एवः; तत्तत्विश्वायात्ते वातेन, पितेन,

kūṣṭhakilāsamapī... kañca nāthātām. kūṣṭhakilāsamapī... nātha

कुठ्ठकिलासावयोगतार्थं—क्लेष्यतमेव किलासमपरिश्रावि

kūṣṭhakilāsamapī... kañca nāthātām. kūṣṭhakilāsamapī... nātha

च। तदात्तेन मण्डलमहं पञ्चवं परिश्राविच। पितेन पञ्चपञ्चप्रतीकाण

kūṣṭhakilāsamapī... kañca nāthātām. kūṣṭhakilāsamapī... nātha

सपिरिवाहं च, शक्षमणा श्रेयं सिनां बहुलं कश्चूमच्च। तेषु

kūṣṭhakilāsamapī... kañca nāthātām. kūṣṭhakilāsamapī... nātha

संबद्धमण्डलमन्तजातं भवतरोप चात्महमनिन्दं च ॥१७॥

Leucoderma is also a kind of dermatoses; they are of three types—that due to vāta, pitta and kapha.

Differentiating Features from Leprosy:

The difference between leprosy and leucoderma is that the later is limited to the skin only and has no discharge.

Clinical Features:

Leucoderma Caused By The Vāta

That leucoderma which is caused by vāta is circular, red, indurated, and gives out dusty particles on rubbing.

Leucoderma caused by Kapha

That caused by kapha, is white, oily, extensive and is associated with itching.¹

¹ Itching when present in leucoderma is only secondary.
These leucodermas in which the patches overlap each other and in which the hairs are red\(^1\) at the terminal\(^2\) parts of the body are incurable, as are also those which develop after burns.

18. Complications of Leprosy

\textbf{कुण्ठेषु तु त्वक्कंकोचस्ववाप्स्ववेदशोकभेंदकौण्डिक्षरोपघाता वालेन, पाकावदरणांगुलियतनकर्णनासाभ्या क्षितिरागस्वोत्पत्तयः पित्तेन, कण्डूर्वर्ण्येषोकाँत्यावृंगीरवाणि श्वेप्याम् ॥१८॥}

In leprosy contraction of skin, loss of sensation, excessive perspiration, oedema, tearing sensation, deformity and speech disturbances\(^3\) are due to vitiated \textit{vāta}; suppuration, bursting, dropping off of fingers, breaking off of the ears and nose, congestion of eyes, and production of organisms are due to vitiated \textit{pitta}; and itching, discolouration, oedema, discharge, and heaviness are due to \textit{śleṣma}.

19. The Incurable Mahākuṣṭhas

\textbf{तत्त्राविस्वरूपं प्रियं योण्डरीकं काकर्णं चासाध्येऽः ॥१९॥}

Out of them, the \textit{pauṇḍarīka} and \textit{kākaṇaka}, which are due to defect in the germ cells, are incurable.

20, 21. Sequelae of Untreated Leprosy

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1. Red hairs are seldom seen in leucoderma.
2. Like lips, hand, feet and anal region (Dalhanā).
3. Speech disturbances is seldom, if at all a direct complication of dermatoses including leprosy.
These verses have been quoted in this context.

As a growing plant in due course of time spreads inside the earth by its roots and further proliferates with rains, similarly leprosy appearing in the skin, in due course of time spreads in the *dhātu* sequentially in those patients who remain untreated.

22. Clinical Features of Skin Leprosy

स्पर्श्याहानि: स्वेदनत्वमोच्यत्रकण्ढावर्षणां जायते।
बच्चर्यं हक्कभावश्रच कुष्ठे त्वचिः समाधिः।

Loss of tactile sensation, excessive perspiration, slight itching, discolouration and feeling of dryness are produced in leprosy located within the skin.

23. Clinical Features of Leprosy Involving *Śoṇita*

त्वक्ष्यापो: रोमहय्युवय त्वेदयामिप्रवर्तनम्।
कण्ठूपङ्गुवियसिंधुजेव कुष्ठे शोण्डितसंधिः।

Loss of tactile sensation, horripilation, excessive perspiration, itching and suppuration are produced in leprosy located in the *rakta*.

24. Clinical Features of Leprosy Involving *Māṁsa*

बाहुल्यं वक्षोपशच कार्यक्ष्यं गडङ्केवग्रम:।
तोद्व: स्फोटः स्थिरत्वं च कुष्ठे मांससमाधिः।

1. *Seven dhātu*- rasa, *rakta*, māṁsa, meda, majjā, *asti* and *śukra* in that order.
Big patches, dryness of the mouth, roughness, production of multiple boils, pricking pain, blisters and induration are produced in leprosy located in the *māṁsa*.

25. Clinical Features of Leprosy Involving Meda

दौर्गन्ध्यमुपदद्रहस्य पूयोद्वय त्रिभयस्तथा।
गात्राणं भेद्यं चापि कुष्ठे मेदःसमाख्यिते॥२५॥

Bad smell, soddening, pus formation, production of organisms and tearing sensation in the limbs are produced in leprosy located in the *meda*.

26. Clinical Features of Leprosy Involving Asthī and Majjā

नासामय्योशिराकाश्च क्षते च त्रिमितःःःःःःःःः
भवेत् स्वरोपप्यातावस्य हस्तियमजज्ञमाख्यिते॥२६॥

Falling off of the nose, congestion of the eyes, production of organisms in the lesion, and speech disorders are produced in leprosy located in the *asthi* and *majjā*.

27. Clinical Features of Leprosy Involving the *Sukra*

कौण्यं गतिक्षयोऽक्तानां समेवः क्षतसप्तम्।
शुक्कस्थानगते चिरं प्राणुक्तानि तथेत च॥२७॥

Paralysis of the hands, loss of movements of the limbs, tearing sensation of the limbs and spreading of the lesions are produced when it (leprosy) reaches the site of *sukra*; as also all those features mentioned above are produced.

28. Leprosy as a Hereditary Disease

स्त्रीपुरुसयोः कुष्ठदोषावदुष्पशोषोणितशुक्रयोः।
यदयत्य तयोजातं ज्ञेयं तदवपि कुष्ठितम्॥२८॥
The child born of a woman and a man with vitiated ovum
and sperm due to leprosy should be regarded as leprotic.

29. Prognosis of Leprosy

krūṣṭāmātavat: saādhyaṃ tvaṃ prakṛtatīṣṭhaṃ tīṣṭhaṃ.

Leprosy is curable in the prudent if it is located within
_tvāk, rakta_ and _māṃsa_; it is relievable if it involves _meda_ whereas
it is incurable if it is located in the rest of the dhātus.

30–32. Effects of Good and Bad Deeds on Leprosy

brahminasajjanavatiharvanāvibhir.

karmābh: pāparogasya prāhu: kruṣṭayam sambhavat: 11.3.11

bhikṣate idānīṃ kruṣṭan pūrṇajñetāpya gacchatāt.

nāt: kruṣṭīrīrī rogho yadā kruṣṭa prakriyātāt 11.3.11

āraḥāraḥarayō: prakrētāmaṣṭhaṃ mahīṃ añēṣāmām.

āūṣadhānaṃ viśiṣṭānaṃ tapyaschat nīveṣaṇāt.

yasten mukhyate janū: s āpanāṃ gatimāṇaṇaṃ 11.3.21

It has been said that the evil acts of killing of _brahmīns_,
women, and noble persons and taking of others riches etc.,
produce leprosy as a disease of sin.

If one dies due to leprosy, he gets the same disease when
he is reborn; therefore there is none more distressing disease
known than leprosy.

One who, having faith in the diet and daily rituals mentioned (elsewhere) carries out the same great deeds and the
person who gets rid of this (leprosy) disease due to the use of
special medicines and religious austerities obtains healthy
body.

33, 34. Modes of Spread of Contagious Diseases

pratishānāmānugamānānāmānunālānānātāntu saṁbhūjitaṃ.

saḥsahāyaśvinācārapī vatsrāmaḥśrṇuṇānapānāt 11.3.31.
Kuśtha, fever, consumption, conjunctivitis and infectious diseases spread from human beings to human beings due to sexual intercourse, touching of the body, due to breath, eating together, and even sharing the same bed and by clothings, garlands and cosmetics.

Thus ends the fifth chapter entitled ‘Diagnosis of Skin Diseases (including Leprosy)’ of Nidāna-Sthāna of Suśruta-Samhitā.
SUGGESTED RESEARCH PROBLEMS

1. A clinical and comparative study for the identification of various diseases or varieties of \textit{kushas} should be done.

2. Characteristic features of leprosy viz. anaesthetic patches, excessive sweating or its loss, non-healing trophic ulcers, deformity of the nose etc, have been described amongst the clinical features (4, 8–15). A historical study regarding their early mention would be interesting.

3. A historical study of the infectious diseases would be worthwhile in view of the succinct description (54) of the mode of spread of contagious diseases.
CHAPTER SIX
NIDĀNA-STHĀNA

Diagnosis of Urinary Abnormalities
Diagnosis of Urinary Abnormalities

S.S.II.6

SUMMARY

This chapter deals with the diagnosis of twenty urinary abnormalities and with that of the boils associated with them.

The predisposing factors (3), aetiology, pathogenesis (4), prodromal (5) and general features (6) of the urinary abnormalities have been given. Ten of these abnormalities originate from (vitiating) kapha and are curable, six are due to vitiated pitta and are relievable, four are due to (vitiating) vata and are incurable (8, 9). Clinical features of all the urinary abnormalities have been given separately (10—12); their complications (13) have been described doshewise. The description of kaphaja variety includes the clinical features of diabetes mellitus, diabetes insipidus and phosphaturia (10). Attraction of flies to the urine of these patients has been mentioned (13). Clinical features of pitta type are suggestive of hematurias of various degrees (11) and of systemic infection. Vatika types include chyluria etc. (12).

Pathogenesis and clinical features of the ten types (14—19) of boils occurring in such patients have been dealt with individually. The description includes features of carbuncles and other infective lesions. Emphasis has been laid on the boils which are incurable (20—21).

Definitions and essential features of pramehi (one suffering from urinary abnormalities) and of madhumehi (pramehi with boils and other complications) have been given (22—27).
Chapter Six

1. अथात: प्रमेहनिदानं व्याह्यास्यामः ॥१॥

Now we would expound upon the chapter entitled "Diagnosis of Urinary Abnormalities".

2. यथोवाच भगवान् धन्वन्तरि: ॥२॥

As was described by Lord Dhanvantari.

3. Predisposing Factors

दिवास्वप्नाव्यायामालस्यप्रवक्तं झोतस्विगमधुरमेधद्रव्याल्पपान-
सेविनं पृष्ठं जानोयात् प्रमेही भविष्यतीति ॥३॥

The person who indulges in day sleeping, abstains from physical exercise, is lazy and takes cold, slimy, sweet and fatty foods or drinks should be known as one who would develop urinary abnormalities.

4. Pathogenesis

तस्य चैवप्रवृत्तस्यापरिपथवा एवं वातपितसङ्गमाणां यदा
मेदसा सहृक्षमुपेत्य मूत्रवाहिस्तातस्यनुसृत्याष्टो गत्वा बस्तेनुभामा-
थित्य निर्मितः तदव प्रस्तेहावजनयति ॥४॥

In such a person, when the immature vāta, pitta and kapha combine with meda and get unified they go downwards following the urine conducting channels and getting located at the neck of the bladder are excreted and thus produce urinary abnormalities.
5. **Prodromal Features**

\[
\text{तेषां तु पूर्वस्पर्शि—हस्तपादतलवाहः सिन्धुपिंचिलगुम्भता गात्रां मधुरज्वालमृत्ति तन्त्रा सादः पिपासा दुर्गमवृत्त श्वासस्तालु-गलंजिलावलघु मलोत्त्तिमिर्जिलिङ्काचः केशां बृहियश्च नखानाम्} ।
\]

Their prodromal features are:

- Burning sensation in the palms and soles;
- Oiliness, sliminess, and heaviness in the limbs;
- Sweetness and whitishness in the urine;
- Drowsiness; lethargy; thirst;
- Bad smell in the breath;
- Production of deposits in the palate, throat, tongue and teeth; matting together of hairs; and increased growth of nails.

6. **General Features**

\[
\text{तत्राविभ्रूणमृत्तमृत्तलक्षणः: सवं एव प्रमेहः भवति।} ।
\]

Turbidity and excessive urination are the symptoms present in all types of urinary abnormalities.

7. **Aetiology**

\[
\text{सवं एव सवंदोषसमृत्या: सहु धिक्कनम्।} ।
\]

All (urinary abnormalities) are due to vitiation of all the doshas together (vāta, pitta and kapha) as also are the associated furuncles.

8. **Doṣawise Classification and Prognosis of Urinary Abnormalities**

\[
\text{तत्र, कप्पादुक्केशुचालिकासुरिकतासनलंवणपिण्डसान्त्रृक्क्कमेहः वस्त्र साध्यः: दोषद्वष्णां समक्रियत्वात्; पितामहिन्द्राय-स्मारामहिन्द्रायोषिणिमेहः: बझ्यायः; दोषद्वष्णां विभ्रम-क्रियत्वात्; वातालु सर्पिङ्कसाध्यमात्रेषुवस्त्रसाध्यतमः; महात्त्त्विक्षत्वात्।} ।
\]
Urinary Abnormalities due to Kapha

Udakameha, ikṣūvālikāmeha, surāmeha, sikatāmeha, śanairmeha, lavanaṃmeha, piṣṭameha, sāndrameha, śukrameha, and phenameha; these ten (urinary abnormalities) are due to (vitiated) kapha and they are curable because of the identical remedial measures which have to be employed both for the correction of (vitiated) doṣas as for the vitiated tissues (dūṣya).

Urinary Abnormalities due to Pitta

Nilameha, haridrāmeha, amlameha, kṣārameha, maṇḍīṣṭhāmeha, and raktaṃmeha; these six (urinary abnormalities) are due to (vitiated) pitta and they are relievable only because of the remedial measures being dissimilar which have to be employed for the correction of (vitiated) doṣas and the tissues.

Urinary Abnormalities due to vāta

Sarpirmeha, vasāmeha, kṣaudrameha, and hastimeha; these four (urinary abnormalities) are due to (vitiated) vāta and they are incurable because of their being extremely serious.

9. The Doṣas in Relation to Urinary Abnormalities

तत्र वातपित्तमेवोभिरन्वितः श्लेष्मा श्लेष्मप्रमेहायामज्ञयति, वातकफशोणितमेवोभिरन्वितं पितं पित्तप्रमेहान, कफपित्तवसामज्ञमेवो
भिरन्वितो वायुर्वातप्रमेहान।१९॥

Now, kapha in combination with vāta, pitta and meda produces the urinary abnormalities of kaphaja origin.

Pitta, in combination with vāta, kapha, sōṇita and meda produces the urinary abnormalities of pitta origin.

Vāyu, in combination with kapha, pitta, vasā, mājjā and meda produces urinary abnormalities of vāta origin.
10. Clinical Features of Urinary Abnormalities due to Kapha

तत्, श्वेतमवेदनसुदकसूक्ष्ममुक्कमेही मेहति; इक्षुसतुल्यम-शुकवालिकमेही; सुरातुल्य सुरामेही; सहज सिकतानुबिधं सिकतामेही; शानं सकरं मृत्तं शलमेही; विषाधं लवणतुल्यं लवणमेही; हृद्दरोमं पिष्टसतुल्यं पिष्टमेही; आविंदं सान्त्रं सान्त्रमेही; शुकतुल्यं शुकमेही; स्टोकं स्टोकं सफेनमच्छं पेनमेही मेहति॥१०॥

One suffering from udakameha micturates whitish, watery (urine) without pain.

One suffering from ikṣuvālikāmeha (micturates urine) like sugarcane juice.

One suffering from surāmeha (micturates urine) like wine.

One suffering from sikatāmeha (micturates urine) with pain, mixed with gravel.

One suffering from sanairmeha slowly (micturates) mucoid muddy (urine).

One suffering from lavaṇameha (micturates) clear (urine) like saline water.

One suffering from piṣṭameha has horripilation and (micturates urine) like water mixed with ground flour.

One suffering from sūndrameha passes turbid and concentrated (urine).

One suffering from sukrameha passes (urine) similar to semen

One suffering from phenameha micturates clear and foamy urine in small quantities repeatedly.

1. *Phosphaturia.*
11. Clinical Features of Urinary Abnormalities due to Pitta

अत ऊष्णः पितानिमिततान् बक्ष्याम्—सफेनमच्छ नीलं नीलमेही मेहः; सवाहं हृदिरामं हृदिरामेही; अम्लसपन्धमस्मेही; स्नूतकार्यं श्वासेही; मधिज्ञानकप्रकाशं मधिज्ञानमेही; शोणितप्रकाशं शोणितमेही मेहित।

Now we would hereafter describe the (urinary abnormalities) caused by (vitiating) pitta.

One suffering from nilameha micturates foamy, clear and bluish (urine).

One suffering from haridrāmeha (passes urine) of turmeric colour along with burning pain.

One suffering from amlameha (passes urine) of sour taste and odour.

One suffering from ksārameha (passes urine) like solution of alkalies.

One suffering from mañjiṣṭhāmeha (passes urine) like mañjiṣṭhā water.

One suffering from sopitameha passes urine like blood.

12. Clinical Features of Urinary Abnormalities due to Vāta

अत ऊष्णः वातानिमिततान् बक्ष्याम्—साप्तप्रकाशं सापमेही मेहः; वसाप्रकाशं वसामेही; क्षोदरसर्वं क्षौमेही; मतमात्राशः वदनप्रवर्त्यं हृस्तिमेही मेहित।

Now we would hereafter describe the (urinary abnormalities) caused by (vitiating) vāta.

One suffering from sarbirmeha micturates urine like ghee.

One suffering from vasāmeha\(^1\) (passes urine) like fat.

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1. Chyluria.
One suffering from kṣaudrameha (passes urine) of the colour of honey.

One suffering from hastimeha (passes urine) unrestrained like an intoxicated elephant.

13. Doṣawises Complications of the Urinary Abnormalities

The complications of urinary abnormalities, of kapha origin are: sitting of the flies, lassitude, muscular hypertrophy, corpulence, lethargy, distaste for food, indigestion, mucous discharge, vomiting, (excessive) sleep, cough and breathlessness.

The complications of urinary abnormalities of pitta origin are: tearing sensation in both the testes, tearing sensation of urinary bladder, pricking pain in penis, precordial pain, sour eructations, fever, diarrhoea, distaste for food, vomiting, feeling of emission of fumes around, burning sensation, unconsciousness, thirst, insomnia, anaemia and yellowish discolouration of stool, urine and eyes.

The complications of urinary abnormalities of vāta origin are: constricting sensation in the precordium, craving for vary-

1. *Copious urine without any control in an unbroken stream.*
2. *The patient’s urine attracts flies.*
ing tastes, insomnia, rigidity, tremor, colics and constipation. Thus these twenty urinary abnormalities along with their complications have been described.

14. Pathogenesis and Types of Associated Boils

Now the three vitiated *doṣas*, after spreading in the tissues with excessive fat and fatty tissues in patients suffering from urinary abnormalities, produce ten types of boils (*piḍakās*).

They are: *śarāvikā, sarṣapikā, kacchapikā, jālinī, vinatā, putriṇī, masūrikā, alaji, vidārikā, and vidradhikā.*

Clinical Features of Boils (15—19)

15. Śarāvikā and Sarṣapikā

*śaraṃśātāṃ tuṇḍiṇa nimsāmpa śaraṃśaka.*

Śarāvikā is of the appearance and size of an earthen saucer with depression in the centre.

And sarṣapikā is of the shape and size of white mustard.

16. Kacchapikā and Jālinī

*Kacchapikā is known by the wise to be associated with burning sensation and to be of the shape of a tortoise.*

Jālinī, on the other hand, has severe burning pain and is surrounded by a network of fleshy mass.
17. **Vinatā and Putriṇī**

सहृती पिडका नीला पिडका विनता स्मृता।
सहृत्यपाचिता जेया पिडका सा तु पुत्रिणी।

The *vinatā* boil is known to be the big and blue boil.
That boil which is big in size surrounded by multiple small boils should be known as *putriṇī*.

18. **Masūrikā and Alajī**

मसूरसमसंस्थाना जेया सा तु मसूरिका।
रक्तता सिता स्फोटवती वार्षा त्वलजी भवेत्।

A (boil) similar to lentils should be known as *masūrikā* (boil).

And *alajī*, on the other hand, is reddish-white along with blisters and induration.

19. **Vidārikā and Vidradhiṅkā**

विदारीकल्वद्वृत्ता कठिना च विदाविरिक।
विद्रधेल्क्षणंयुक्तः जेया विद्रधिङ्का बुधः।

*Vidārikā* is round and hard like a gourd.
The boil which is associated with the features of an abscess should be known by the wise as *vidradhiṅkā*.

20/1. **Aetiology of Boils**

ये यन्मया: स्मृता मेहास्तेषामेतास्य तत्कातः।

The aetiological factors which are responsible for the urinary abnormalities are also the causes of these (boils).

20/2, 20/3. **The Incurable Boils**

गुदे हृदि शिरस्यंसे पृष्ठे मर्मणि चोटिविता।
सोप्रवर्जना दुर्बलः: पिडका: परिवर्जितेः।

II 2011
The boils arising in the rectum, precordial region, head, shoulders, back and on the vital spots associated with complications in a person with weak digestive power should be discarded (from treatment, because of their incurability).

21. The Incurability of Boils of Vāta Origin

The vāyu along with meda, mājjā, and vasa, having gripped the body all over comes down; hence the boils of vāta origin are definitely incurable.

22, 23. Definition of Pramehi

In whomsoever the prodromal features of urinary abnormalities are seen and even if there is a slight increase in urine, he should be considered to be a pramehi (one suffering from urinary abnormalities).

In whomsoever person the prodromal features are present fully or partially and who has an excessive urination should be considered to be a pramehi.

24, 25. The Madhumehi (Diabetic)
One who is suffering from boils and has severe complications is called *madhumehi*\(^1\) and that is considered incurable.

And he prefers to stand rather than move from place to place, prefers sitting to standing, lying down to sitting, and desires to sleep rather than lie down in bed.

26, 27. Further Considerations on the Pathogenesis of Prameha and Madhumeha

\[
\text{यथा हि वर्णानां पञ्चानामुक्तकर्पकर्ष्कुतेन संयोगविशेषेण}
\text{शब्दश्चुकुपिलकपितमेचकादीनां वर्णानामकेकामुक्ततिमेच्छति,एवमेव}
\text{दोषधातुमलाहारविशेषेणकर्पकर्ष्कुतेन संयोगविशेषेण न्रमेहार्णा}
\text{नानाकरणं भवति} \text{126} \text{11}
\]

\text{भवति चतुर्—}

\[
\text{सर्व एव प्रमेहास्तु कालेनप्रितिकुर्वत्} \text{11}
\text{मधुमेहवधायानि तदासाध्या भवति हि} \text{127} \text{11}
\]

Just as by an increase or decrease of and by specific combinations of the five colours\(^2\) various other colours like *śabala*, *babhru*, *kapila*, *kapota*, *mecaka* etc. are produced, similarly by specific increase or decrease of and by the specific combination of the *doṣas*, *dhātuḥ*, *malas* and foods, various types of urinary abnormalities are produced.

The (following verse) has been quoted in this context:

All types of urinary abnormalities, if not treated in time develop *madhumeha* and then become incurable.

\[
\text{इति सुप्रभुतसंहिताया नवानस्ताने प्रमेहिनिवानं}
\text{नाम वष्ठोद्धयाय}. \text{116} \text{11}
\]

Thus ends the sixth chapter entitled "Diagnosis of Urinary Abnormalities" of *Nidāṇa-Sthāṇa* of *Suṣruta-SAṁhītā*.

---

1. One who passes sugar in urine.
2. White, green, black, yellow and red.
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study of urinary disorders in other systems of medicine should be done.

2. An attempt could also be made to establish the identity of the clinical entities described here.

3. Some of the etiological factors are known predisposing causes of diabetes. The role of other factors in the aetiology of diabetes could also be clinically and experimentally studied (3).

4. Passage of sugar in urine has been remarkably considered as also the association of boils with it (10, 15). A comparative and correlative study regarding the earliest mention of their clinical features in other systems would be interesting and instructive.

5. The doçawise complications (13) of urinary abnormalities should be identified with the modern clinical conditions and their importance in genito-urinary diseases brought to light.
CHAPTER SEVEN
NIDĀNA-STHĀNA
S. S. II. 7

SUMMARY

This chapter deals with the etiology, clinical features and prognosis of abdominal enlargements. Eight types of abdominal swellings have been described. Ascites, hepato-and splenomegaly, intestinal obstruction and perforation have been specifically mentioned in addition to dosika types (4).

Increased pressure of vitiated dosas in the channels due to poor digestion and faulty conduct (5, 6) has been mentioned as the common etiological factor. General and specific clinical features of the three dosika types have been described (7/2—11/1). Chronic poisoning (11/2—14/1) has been mentioned as the cause of sannipatodara.

Swelling in the left side has been mentioned to be caused by splenomegaly and on the right side due to hepatomegaly (14/2—16).

Among the features of intestinal obstruction faecal vomiting with abdominal distension has been emphasized (17—19/1). Further, foreign bodies causing intestinal perforation and leakage of its contents have been described as parisravayudara (19/1—21/1).

Clinical features of ascites including the eversion of umbilicus and fluctuation have been described. Ascites occurring as a complication or an end result of all abdominal disorders has been emphasized and mentioned as a bad prognostic sign (21/2—25).
Chapter Seven

1. अयात उदराणां निवानं व्यायाम्यायम्: ||११||

Now we would expound upon “The Diagnosis of Abdominal Enlargements”.

2. यथोवाच भगवान् धनवतरि: ||२१||

As was described by Lord Dhanvantari.

3. धनवतरिधर्मंभूतां वरिष्ठो राजाविदिविनिरप्रतिमोभवः।
ब्रह्मणिनुथं विनयोपपरं शिष्यं शूरं सुभूतमन्वशात् स: ||३१॥

Dhanvantari, greatest amongst the religious, sage amongst the kings and who was equal (in glory) to Indra, thus discoursed to the noble and modest student Suśruta, son of Brahmarṣi.

4. The Eight Types of Abdominal Enlargements

पृथक् समस्तःरपि चेह दोषेः: भ्लौहोवरं बहुगुणं तथेव।
आगन्तुकं सत्तममण्डमं च बहोवरं चेति ववति तानि॥४॥

There are eight types of abdominal enlargements: those due to the three doṣas separately (vātodara, pittodara, kaphodara), that due to all the vitiated doṣas together, plshodara, and baddhaguda; āgantuka is the seventh and dakodara is the eighth one.

1. Sage Viśvāmitra.
Aetiology and Pathogenesis

Due to partaking of non-beneficial diets and due to the use of dry and putrified foods by persons of extremely weak digestion and due to the faulty use of oleation etc.,¹ the doṣas get loaded in the abdomen, and having increased therein manifest symptoms of a rounded abdominal swelling² and cause severe abdominal diseases.

Aetiology of Distension of Abdomen in Abdominal Diseases

As oil percolates out of a new earthen pot³, similarly the extract of digested food comes out of the abdominal organs due to the pressure of vāta, becomes vitiated and goes on increasing, and thus gradually increasing raises the skin all over and produces abdominal enlargement.

Prodromal Features

1. The pañcakarmas—snehana, svedana, vamana, virecana and āsthashpāna.
2. Gulma literally means bush like swelling—the simile being that of a big rounded swelling.
3. Dalhaṇa.
Their prodromal features are a diminution of strength and of complexion, loss of appetite, obliteration of abdominal folds, appearance of striae on the abdominal wall, inability to know when digestion is complete, burning sensation, pain in urinary bladder region and oedema over the feet.

8/2, 9/1. Vātodara

When vāta increases after having got located in the sides, abdomen, back and umbilical region, prominence of bluish veins occurs and it produces loud noise with pain, as in meteorism along with pricking and tearing sensation, that (abdominal enlargement) is due to vāta.

9/2, 10/1. Pittodara

When there is sucking pain, thirst, fever, burning sensation and yellow colouration, and when veins and complexion along with eyes, stool, urine, nail and face become yellow, it should be known as pittodara and it increases rapidly.

10/2, 11/1. Kaphodara

When there is a feeling of coldness, prominence of white veins, feeling of heaviness, stasis, whiteness of the nails and face, sliminess, marked oedema and lassitude, it should be known as kaphodara and it increases slowly.
The blood and *doṣas* get vitiated soon and produce severe abdominal disorders (*sannipātodara*) with the symptoms of all the three *doṣas* in persons to whom women with unrighteous behaviour offer food and drinks mixed with nails, hairs, urine, faeces and menstrual fluid, and to whom enemies give ‘*gara*’ poison or who use contaminated water or ‘*dūṣi*’ poison.

That (disease) is aggravated and produces burning sensation specially during the cold, windy and cloudy weather. And that patient faints repeatedly, becomes anaemic, emaciated and dehydrated due to thirst. This is the description of severe *dūṣyudara*.

Now please listen to the description of *plīhodara*.

The blood and *kapha* get excessively vitiated in that person.
who takes hot and abhisyandi food, which then enlarges the spleen and that is said to be pithodara by the learned.

It (spleen) increases on the left side (of the abdomen) and the patient in this disease gets fatigued particularly. Mild fever and weak digestion with the symptoms of kapha and pitta and loss of strength and severe anaemia occur.

If same features appear on the right side (of the abdomen) and the liver is involved, it should be known as yakṛddālyudara.

17—19/1. Baddhagudodara (Intestinal obstruction)

When food or slimy substances, hair or small stones gather collectively or separately in the intestines of the patient, the faeces along with the doṣas gradually accumulate in him like that in a drain.

The faeces then get obstructed in his rectum and even when it comes out, it is in very small amounts and with difficulty. It distends his abdomen between the precordium and umbilicus and faecal smell is present in the vomitus; this condition should be known as baddhagudodara.

Now please listen to the description of parisṛavyudara.

19/2—21/1. Parisṛavyudara (Āgantuka or Foriegn Bodies causing perforation)

1. Moist, slimy and heavy foods which obstruct the channels e.g. yougurt.—Dalhana.
When a foreign body taken along with food or otherwise lies abnormally it pierces the intestines. An exudation, like water, comes out of the patient's intestines and also a similar exudation is discharged from his rectum. This distends the abdomen below the umbilicus and causes severe pricking and burning sensation. This is called \textit{parisrāvyudara}.

Now please listen to the description of \textit{dakodara}.

21/2—23. \textbf{Dakodara}

The water carrying channels of the person, who drinks cold water soon after oleation, oily enemas, emesis, purgation or after taking enemas of medicated decoctions, get vitiated. And even if those (channels) are lined by oily substance, \textit{dakodara} occurs as in the preceeding one (\textit{parisrāvyudara}). The abdomen becomes very smooth, distends aloud and the umbilicus gets definitely everted as if full of water. Just as a leather bag full of water and air shakes, fluctuates and makes sounds, similar features are produced in \textit{dakodara}.

24. \textbf{General Clinical Features}

\textbf{वातस्यम् ्गमने} नयनधारितवे भौलमायता।
\textbf{शोकः} सदनमझाणां सखः वातपुरोषयोः।
\textbf{दाहस्तूण} च सर्वेऽ जङ्गे तयति भवति हि।
Tympanitis, inability to walk, weakness, weak digestion, oedema, lassitude in the limbs, obstruction to the passage of flatus and faeces, burning and thirst occur in all types of abdominal diseases.

25. Terminal Ascites

अन्ते सल्लिलभावं हि भजन्ते जठराणि तु।
सर्वाण्येव परोपाकात्वात् तानि विवर्जयेत्।।२५।।

Water collects ultimately in all abdominal enlargements in due course of time and then the same should be discarded (from treatment).

इति सुभृतसहितायां निवासस्थानें उदरनिवासं
नाम सप्तमोद्भ्यायः।।७।।

Thus ends the seventh chapter entitled “Diagnosis of Abdominal Enlargements” of Nidāna-Sthāna of Suśruta-Samhitā.
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study of the concepts of splenomegaly, hepatomegaly, ascites, intestinal obstruction and perforation in other systems of medicine would be interesting.

2. Chronic food poisoning seems to be an important factor in the etiology of one of the types (11/2–14/1) and digestive impairment (5–6/1) has been mentioned a common factor of abdominal enlargements. The concepts are interesting and may be worthwhile studying clinically and experimentally, specially in ascites of obscure origin.
CHAPTER EIGHT
NIDĀNA-STHĀNA

Diagnosis of Abnormal Foetal Presentations
SUMMARY

This chapter deals with the etiology, clinical features and prognosis of various forms of foetal malpresentations.

According to some authorities there are four types of foetal malpresentations (4), whereas its classification into eight varieties is more rational according to Sufruta (5). The description includes breech, transverse and other malpresentations (4, 5). The lower extremity and breech presentations have been mentioned as incurable as well as those associated with other general complications e.g. convulsion and puerperal sepsis (6).

Normal labour has been compared to falling down of a ripe fruit (7, 8). Abortion occurs up to 4th month and miscarriage up to 6th month (9, 10).

Clinical features of grave import to the mother and foetus have been described (11, 12). Disease of the mother has been mentioned as the cause of death of the foetus (13).

Delivery of the foetus by caesarian section (14) was indicated in the extreme conditions of the mother to save the foetus.
अष्टमोषध्यायः
Chapter Eight

1. अथातो मूद्रगम्भरनिदानं व्याह्यास्याम: || ११||

Now we would expound upon “The Diagnosis of Abnormal Foetal Presentations”.

2. यथोवच्च भववान्त धन्वतरि: || २१||

As was described by Lord Dhanvantari.

3. Aetiology and Definition

ग्राम्यगम्यानवाहनाध्वगमनप्रस्वर्णप्रतयेकनाथावाहनाभिज्ञात- विषमशयनासनोपवात्वेर्गाभिज्ञातातिरक्तकुटिकतमो जनसोकातिकार- सेवनाभिज्ञातमविरेचनप्रेक्ष्णोलाजीर्णगर्भवात्तनगृहृत्तिकेर्वांगस्य- नामयोग्यते गर्भः; फलस्वरूप वृत्तबन्धनाभिज्ञातिविशेषेषः; स विमुक्तबन्धनो गर्भेश्ययमतिक्रमः यहृत्तिहस्त्ररिवर्जस्वरूपमानः कौषलसंभोमापाध्यति, तस्या जठरसंभोमापाध्यति मूद्र: पाशव- बस्तिकीर्णद्वयोऽअवमीन्नस्तानुकृत्रस्नानमयतमापाकः गर्भ चावयति तत्त्वं शोणिततत्तातेन; तमेव क्रियाविवृत्तमस्यगामनसपथयमनु- प्राप्तमनिरर्ज्यामां विगुणापादसंमोहितं गर्भं मूद्रगम्भर्ज्ञायच्यते || ३१||

Sexual intercourse, use of a vehicle, riding, walking on foot, slipping, falling, compression, running, trauma, use of an uneven bed or seat, fasting, suppression of nature’s calls, excessively dry, acrid and bitter diet, grief, excessive use of alkalies, diarrhoea, vomiting, purgatives, swinging, indigestion, use of abortifacients etc; these causes specially release the foetus from its supports just as a fruit gets specifically severed off from its stalk by a blow. The (foetus), having been
released from its supports, leaves the uterus and getting through the space between the liver, spleen and the intestines, produces agitation in the abdomen. In her, (the mother), due to agitation in the abdomen, the *apāna vāyu* becomes abnormal and having produced any one of these symptoms, such as pain in the sides, bladder region, abdomen or vagina and severe constipation or retention of urine, causes abortion of the young foetus along with discharge of blood. If the same (foetus) sometimes increases in size, travels to the foetal passage abnormally and does not come out, as well as gets stupified, because of vitiation of *apāna vāyu*, then that foetus is called a *mūḍhagarbha*.

4. Four Types of Mūḍhagarbhas

Kila, pratikhura, bijaka and parigha are the types of *mūḍhagarbhas* (described by some). That foetus is *kila* in which the upper extremities and the head and feet point upwards and which obstructs the mouth of vagina like a peg.

When the hands, feet and head come out and the body remains inside—that is called *pratikhura*.

*Bijaka* is that in which the head and one limb are out.

That in which the foetus is situated at the mouth of vagina having covered it like an iron bar used for closing the door is called *parigha*.

1. *Mūḍhagarbha literally means a motionless foetus.*
Thus some describe four types of mūḍhagarbhas. That is not correct. Why so? Because, the (foetus) gets compressed by the opposite acting vāyu and presents in the foetal passage in numerous ways and thus the numerical figure (of four) is quite insufficient.

5. The Eight Types of Mūḍhagarbhas.

Out of them some present at the vaginal opening by the two lower limbs; some by one lower limb, the other one being flexed; some come out with both the lower limbs flexed over the body and the buttocks presenting obliquely; and some present by either chest, sides or back covering the vaginal exit.

Some present by an arm only with the head flexed and turned to the sides; some present by both arms with the head bent; some present by the hands, feet and head with the trunk flexed; and some present at the opening of vagina by one lower limb and the other pointing towards (the mother's) anus. Thus the eight modes of presentations of mūḍhagarbhas have been described briefly.

6. Prognosis

Out of them, the last two types of mūḍhagarbhas are incurable.
The rest also should be discarded (from treatment) if the mother has abnormal sensory perceptions, is troubled by convulsions, vaginal prolapse or retraction, or has puerperal sepsis,\(^1\) asthma, cough or mental confusion.

7, 8. Normal Labour

\[\text{भक्ति चात्र—}\
\text{काळस्य परिणामेन मुक्तं वृत्तार्थम् फलम्।}\
\text{प्रपद्यते स्वभावेन नायत्वा पतितुं श्रवस्।र्व11}\
\text{एवं कालप्रकर्षेन मुक्तो नाडीनिर्मितंधनात्।}\
\text{गर्भाशयस्यो यो गर्भो जातनाय प्रपद्यते।र्व811}\
\]

The following verses have been quoted here:

As by nature a fruit falls from its stalk upon maturation and certainly does not drop in any other way, similarly in due course of time the foetus, having been released from the supports of the cord, starts to come out for delivery from its location within the uterus.

9, 10. Abortion and Miscarriage

\[\text{कृमिवातासमितातैत्स्तु तत्वोपात्तुं फलम्।}\
\text{पतत्यकालेको यथा तथा स्वाक्षर्मविच्छिद्य।।119।}\
\text{आच्छव्यान्तर्गतो मासात् प्रस्थापनस्वर्मविच्छिद्य।।}\
\text{तत्: स्थिताश्वस्त्रय पात: पत्रवस्सनायो:।।110।}\
\]

As a fruit affected by organisms, wind or trauma falls untimely, similarly a foetus can also be expelled (untimely).

Upto the fourth month (of pregnancy) the foetus is aborted; thereafter in the fifth and sixth months the well formed body is miscarried.

\[\text{l. Ref. to S.S.II.9.26, 27.}\]
11. Signs of Imminent Death

The (mother) who is constantly shaking her head and whose body feels cold or that woman who is shameless or has prominent bluish veins kills the foetus; so also the foetus kills her.

12. Signs of a Dead Foetus

Stoppage of foetal heart and labour pains, occurrence of cyanosis or palor, foetid odour in the breath and pain occur after the death of the foetus.

13. Causes of Foetal Death

If the mother is suffering from mental or traumatic diseases or from other diseases the foetus dies within the womb.

14. Caesarian Section

If the beatings are still there in the womb (of the mother)

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1. The woman who is not conscious to cover her body with clothes even when naked in presence of others.
in labour suffering as a dying goat, the physician should deliver out the foetus immediately, after opening the abdomen.

इति सुध्रुतसंहितायां निदानस्थ्याने मूढगभिनिदान
नामाष्टमोध्यायः ॥ ८ ॥

Thus ends the eighth chapter entitled "Diagnosis of Abnormal Fetal Presentations" of the Nidāna-Sthāna of Suśruta Saṁhitā".
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study on the obstetrical practice as described here and in other systems of medicine would be interesting, as it seems to have been in an advanced stage of knowledge at the time of Suśruta.

2. The various etiological factors (3) mentioned as the causes of foetal malpresentation may be worth investigating as also a correlative study of the various types of malpresentations (4, 5) with the modern concepts.

3. A historical and comparative study on caesarian section (14), specially about its indications, would be worthwhile in view of its being such a common practice.
निदान-स्थानम्
नवमोऽध्यायः

विद्रधि-निदानम्
Diagnosis of Abscesses

CHAPTER NINE
NIDĀNA-STHĀNA
This chapter deals with the etiology, pathogenesis and clinical features of abscesses.

Six types of external abscesses including the traumatic variety have been described (4–14). Pathogenesis and specific clinical features of internal abscesses according to the site involved have been dealt with in brief (15–22). Spontaneous drainage per anus or outside through the skin has been taken for a better prognosis whereas their drainage through upper passages such as the mouth and nose has been mentioned as of bad prognosis (23–25). Clinical features of puerperal sepsis have been described (26–28). The severe pain and toxaemia of actue osteomyelitis has been vividly described including the formation of cloacae (34/2–38).

Differential diagnosis of an intra-abdominal abscess and a gaseous swelling has been given in detail with special reference to etiology, pathogenesis and clinical features (28–33). Absence of suppuration has been mentioned as an important feature of gulma (gaseous swelling).
Chapter Nine

1. अयातो विद्धीनां निदानं व्याहल्यास्यां: ||१||
   Now we would expound upon “The Diagnosis of Abscesses.”

2. यथोवाच भगवान् धन्यं तृतिः: ||२||
   As was described by Lord Dhanvantari.

3. Lord Dhanvantari Discourses

   सर्वसिद्धान्तं: श्रीमातिरितंतरभूमिकं: ।
   विशेष्योऽवै नितिनिदिः विद्धिलक्षणम् ||३||

   The revered amongst all the Gods, the most respected Lord Dhanvantari who had come on earth as a king with a specific purpose (to discourse on (Ayurveda) spoke to his disciple (Susruta) all the following clinical features of an abscess.

4–6. Pathogenesis and Classification

   त्वप्रक्रतसङ्केरां श्रवीरां प्रदृष्ट्वर्णिशस्माधिरता: ।
   दोषां: शोषित शर्वेण जनयत्वुच्छिष्ठा भूतम् ||४||

   महामूलं संपर्कतं वृत्तं चायधवास्यतम् ।
   तमाह्रविव्रथ्यं धीरा, विशेषं: स व पदिवधं: ||५||

   पृथावधारं: समस्तैव अप्पेतनायसूजा तथा ।
   धण्यामपि हि तेषां तु लक्षणं सस्पदवशते ||६||

   The vitiated doṣas located in the bones afflict the skin, blood, muscles and fat and gradually produce excessively severe inflammatory swelling.
The swelling (described above) which is broad based, painful and round or else elongated is known by the wise physician as an abscess and it is known to be of six types.

The six types are those due to individual dosas (vāta, pitta and kapha), and all together (all the dosas mixed together), that due to trauma and that due to śopita. Clinical features of all these six types are now described.

7. Vātika Abscess

The vātika abscess is black, red or rough and produces excessively severe pain. There are a variety of ways in which it can begin and suppurate.

8. Pitta Abscess

The pitta abscess is like the ripe fruit of udumbara, is blackish, produces fever and burning sensation, has a sudden onset and suppurates quickly.

9. Kapha Abscess

Abscess produced due to kapha arises and suppurates late, is associated with itching, appears like an earthen saucer, is whitish, cold, indurated and has mild pain.

10.1. Characteristics of Discharges
The discharges of these three are known to be thin, yellowish and whitish respectively.

10/2—11/1. Abscess due to Combination of the Doṣas नानावर्णाजालािो घाटालो विषमो महान्।।१०॥
विषम पत्थते चाप्पि विद्रधि: साधिपातिकः।

And the abscess due to a combination of the doṣas suppurates irregularly, has multiple colours, pain and discharge, is raised, irregular and extensive.

11/2—13/1. Traumatic Abscess
tेस्तमेवत्सुभित्तेष्वते भावस्वासेवविन्।।११॥
क्षतीम्ना वायु सितुत: सरकतं पित्तमोर्येत्।
जवरस्तृप्त्या च बाहुख्च जायते तस्य वेप्पिन्।।१२॥
एव विद्रधिरागत्तु: पित्तविद्रधिरक्षणः।

Those who indulge in unsalutary diets and habits, if get a (closed) injury or an open wound caused by their respective agents, in them vāyu induces heat of the injury to vitiate pitta alongwith śonita.

Fever, thirst, and burning are produced in his body. This is an abscess due to trauma and has the clinical features of a paittika abscess.

13/2—14/1. Raktaja Abscess
cुष्णस्फोटावृत्त: श्यावस्तीवदा हस्तावावर:।।१३॥
पित्तविद्रधिरङ्गतु: रक्तविद्रधिरस्तमः।

That is called a raktaja abscess which is covered by black blisters, is blackish, has severe burning, pain and fever and has the features of a pittaja abscess also.
14/2. Prognosis

उक्ता विद्रवयो होते तेषा साध्यस्तु सर्वं: ॥ १४॥

Out of the abscesses mentioned above, the one caused by combination of the doṣas is incurable; (rest are curable).

15—17/1 Etiology of Internal Abscesses

आयुर्वेदिन् परिचक्षते।
गुंभसात्र्यावन्धा शुचिकसृज्ये। भोजनात् ॥ १५॥
अतिरिक्तायावमुद्घात्रीत्वविविधम्।
पृथक् संभूत्वा दोषा: कुपिता गुलसर्पिल्लमु॥ १६॥
वल्मीकिचित्तमुद्ध्रमत: कुष्ठिति विद्रधिम्।

Hereafter, the internal abscesses are described.

Due to taking of heavy, unsuitable, incompatible, dry, and contaminated foods, due to excessive indulgence in sexual intercourse and exercise, due to suppression of nature's calls, and due to the use of hot substances, the doṣas get vitiated singly or in combination and produce internal abscess of the shape of a (bush like) tumour elevated like an anthill.

17/2—19/1. Sites and Clinical Features of Internal Abscesses

गुंधे वस्तिमुखे नान्यं कुष्ठी वद्यादेयं ॥ १७॥
बृक्कषयोयक्ति प्लिन्न्ह हुद्ये वल्सिन्न वा तथा।
तेषां विज्ञानाति जानीयाद्विविधिकल्पणं: ॥ १८॥
आमयवैष्णोच्च पवावृद्धि विनिविसोत्।

They occur in the rectum, mouth of the bladder, umbilicus, both flanks, groins and kidneys, liver, spleen, heart and the kloma.¹ Their features should know as those of external

¹. Usually accepted as pancreas.
abscesses. The (distinguishing) features between a ripe and an unripe abscess should be known according to the description of (the chapter on) "The Unripe and Ripe Abscesses".

19/2–22. Specific Features of Abscesses According to the Site of Lesion

अधिष्ठातानविशेषेण लिंगं श्रृंगु विशेषतः।।11।।
युद्धे वातनिरोधस्तु बस्ती कृष्णाल्पमृत्तका।
नाम्यां हिक्का तथास्तोषः कुशी भास्करोपनम्।।20।।
कदत्तीपुष्पार्हस्तीब्रो बड्क्षाणोत्ये तु विद्रथी।
वृक्कयो: पाश्वसंहस्तोऽयं जलदुष्वासावरोधनम्।।21।।
सर्वीष्ठप्रपहस्तीब्रो हृदि शूलदेश दाहणः।
श्वासो यक्ति तृणा च पियासा कलोमज्जेधिका।।22।।

Now please listen to their special features according to the sites involved.

If (the internal abscess is situated) in the rectum obstruction to flatus occurs; if in the bladder dysuria and oliguria occur; if in the umbilical region hiccough and borborygmi occur; if (the abscess is) in the flanks the vata gets vitiated.

If the abscess is in the groins severe catch in the waist and back occurs; if in the kidneys contraction of the sides and if the abscess is in the spleen, obstruction to the breath occurs.

If (the abscess occurs in) the heart, excessive pain and feeling of severe rigidity occurs all over the body; if in liver breathlessness and thirst occur; whereas if (the abscess is) in the kloma thirst is more in evidence.

1. S.S.I. 17.

2. Scoliosis occurs in nephrogenic and perinephric abscesses with concavity of the spine towards the affected kidney.
23—25. Prognosis

आयो वा यदि वा पक्वो महान् वा यदि वेतरः।
संवेद ममोर्भितचाय प्रविष्टिः कष्ट उच्चते।॥२३॥

नामेष्यरजः पक्वा यान्त्यायभिमितो त्वथः।
जीवत्यधो निःशुद्धिः हस्तेपूर्णं न जीविति।॥२४॥
ह्रस्वाभासितवच्चेण ये तेषु भिक्षेषु बाह्यतः।
जीवेत् कदाचित् पुर्वो नेतरेषु कदाचन।॥२५॥

All the abscesses arising from the vital parts are difficult to treat irrespective of their being unripe or ripe and big or small.

The abscesses situated above the level of umbilicus on suppuration spread upwards, and the others situated below the umbilicus spread downwards; if they burst downwards the patient lives, whereas if they burst upwards, he does not live.

The patients, except those with abscesses in the heart, umbilicus and bladder may sometimes live if the abscesses burst outwards but never otherwise.¹

26—27. Makkalla Raktavidradhi (Puerperal Sepsis)

स्त्रीणामप्रजातानां प्रजातानां तथाप्पहिते।
वाह्यज्ञारको घोरो जायते रक्तंविष्क्रमः।॥२६॥
अपि सम्यक्प्रजातानामसृक् कायादिनःसुतम्।
रक्तरं विश्राधी कुर्यात् कुशी सवकल्लसंज्ञितम्॥२७॥

Women who have had abortions or full-term normal delivery and who indulge in unsalutary diets and habits get a dangerous type of abscess of blood origin accompanied with burning sensation and fever.

1. *They would die if the abscesses burst internally.*
Even if the delivery is normal but if the blood does not come out of the body, it causes abscess of blood origin in the flanks and is called *makkalla*.

28/1. सप्ताहारोपशास्त्रशक्तात्मतितोक्षातं सत्रपोच्चे ।

If this does not subside in a week’s time, it suppurates.

28/2–33. Differentiation between Gulma and Abscess

विशेषतमा चक्षुणि स्पष्टं विद्रधिगुल्मयोः ॥२८॥

गुल्मदोषसमत्वातानादिद्रधेंगुल्मकर्य च।

कर्तमात्र पच्छे गुल्मो विद्रधि: परकेवि च। ॥२९॥

न निवादंतित गुल्माणां विद्रधि: सत्विन्यन्तः।

गुल्माकारा: स्वयं दोषा विद्रधिमांसशोणिते। ॥३०॥

विवरानुजरो ग्रन्थिबंद्धुः बुद्वर्दोर्त्वयो।

एवं बकारो गुल्मस्तु तस्मात् पाकं न गच्छति। ॥३१॥

मांसशोणितात्त्वाहुः रात्त्वात् पाकं गच्छति विद्रधि:।

मांसशोणितात्त्वाहुः रात्त्वात् पाकं न गच्छति। ॥३२॥

गुल्ममितात्त्वात् दोषेऽस्य बिद्रधिमांसशोणिते।

बिद्रधि: पुच्छे तस्मात् गुल्मद्वापि न पच्छे। ॥३३॥

Now I would discourse on differentiation between *gulma* (a gaseous swelling of the abdomen) and an abscess for clarity.

As both *gulma* and the abscess occur because of aggravation of similar *doṣas* and similar etiology why is it that *gulma* does not suppurate whereas an abscess does so?

The *gulmas* are without any base whereas the abscesses are with it; the vitiated *doṣas* themselves form into the shape of a *gulma* whereas the abscesses are confined to muscles and blood.

8. *A dangerous abscess in the abdomen* (peculiar to lying in women) (*M.W.p.771/3*).
A. *gulma* is just like a knobbly swelling of water bubble moving within the (abdominal) cavity, hence it does not undergo suppuration.

The abscess proceeds to suppuration because of preponderance of muscles and blood. The *gulma* does not proceed to suppuration due to lack of muscles and blood.

The *gulma* is situated within its own *doṣas* whereas the abscess is in the muscles and blood; therefore the abscess suppurates and the *gulma* does not suppurate.

34/1. **The Incurable Abscesses**

हुँसासमिबंबित्वः पवचो वल्योऽदचः त्रिदोषवः।

Suppurations occurring in the heart, umbilicus and urinary bladder and also those due to a combination of the three *doṣas* should be discarded (from treatment).

34/2–38. **Osteomyelitis**

अय महजपरिपाको घोरः समुपजायते।\(\text{134}\)।

सोस्तिमांतसनिरोधेन द्वारं न लभते यदा।

ततः स स्वाच्छिन्न तेन ज्वलनेन्द्र वहः।\(\text{135}\)।

अस्तिमज्जोपेना तेन शीयते वहमानवत्।

विकारः शाल्यभूतोप्य बलाधयेतातुर्ण चिरम्।\(\text{136}\)।

अय तय कर्मणा स्वाच्छिन्न नु लभते यदा।

ततो मेवः प्रभुः स्निहं शुकं शीतमथीयो गुं।\(\text{137}\)।

सिन्धोशिष्ठ निःलक्षेत् पूयमेतदियसगतं विहुः।

विन्दुः शाल्लमुकुशाः सवर्योपशलाः।\(\text{138}\)।

Now (sometimes) the bone marrow gets suppurated severely. When it (the suppuration) does not gain an exit due to obstruction of bone and muscles in this disease the patient feels burning sensation like (being burnt in) a fire.
He withers as if being burnt due to the heat of the bone and bone marrow.

This (sequestrum) disease like a foreign body troubles the patient for a long time.

Now when this disease gets an outlet by the indicated management, a slimy, white, cold and heavy pus which is fat like is discharged. This is known as bone abscess by the experts in this science and is due to vitiation of all the dośas and is painful.

इति सुधृःतसंहितायां निवानस्थाने विद्विधिनिवातनां
नाम नवमोङ्ग्लयः || 9 ||

Thus ends the ninth chapter entitled “Diagnosis of Abscesses” of the Nidāna-Sthāna of Suśruta-Saṁhitā.
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study of the classifications, aetiology and pathogenesis of abscesses in different systems of medicine would be instructive.

2. It may be worthwhile to look into the etiological (4—17/1) factors mentioned which may be predisposing to infection, the accepted cause of abscesses today.

3. A historical and comparative study on internal abscesses (15—27) could be done.

4. Clinical study of the prognostic signs (23—25) regarding the drainage of internal abscesses mentioned here may be carried out.

5. Gulma (abdominal gaseous swelling) has been described here and in other Āyurvedika texts as well. It may well be to clarify this clinical syndrome on the basis of the available descriptions and correlate them with the clinical conditions recognised today (28/2—33).

6. A study on osteomyelitis (34/2—38) in various systems of medicine would be of value from the historical point of view.
विसर्ग-नाडी-स्तनरोग-निदानम्

Diagnosis of Spreading Cellulitis, Sinuses and Breast Diseases

CHAPTER TEN
NIDĀNA-STHĀNA
Diagnosis of Cellulitis, Sinuses & Breast Diseases

S.S.II.10

SUMMARY

This chapter deals with the etiology, pathogenesis, and clinical features of the various types of cellulitis, sinuses and breast diseases. Spreading nature of cellulitis has been emphasised (3). Four types due to doṣas individually or combined and one of traumatic origin (4–7) have been described. Blister formation, black coloration of the limbs, necrosis and destruction of the muscles etc., and high fever with other signs of toxaemia have been mentioned indicating bad prognosis (8).

Sinuses have been compared with a drain (tubular structure); improper drainage of pus and retention of foreign bodies have been mentioned as the main causes of sinuses (9, 10). Eight varieties of sinuses including one due to foreign bodies have been classified (11–14). Classification has been based on types of discharges and general symptoms.

Breast diseases have been mentioned to be similar to that of sinuses and occur only in the pregnant and lactating women (15–17). Milk secretion has been compared to secretion of semen in men dependent upon specific mental and physical stimulation (18–23/1). Physical characteristics of normal and vitiated milk have been described (23/2–25). Clinical features of breast abscesses have been mentioned as similar to those of external abscesses (26, 27).


Chapter Ten

1. अवातो विसर्पनादीस्तत्तरोगनिवानं यथा यास्याम्: ॥१॥
   Now we would expound upon “The Diagnosis of Spreading Cellulitis, Sinuses and Breast Diseases”.

2. यथोवाच भगवान् धन्वन्तरि: ॥२॥
   As was described by Lord Dhanvantari.

3. Aetiology of Cellulitis

   त्वद्मांसशोषणितता: कुपितातु दोषा:
   सर्वासारिणिः प्राक्कार्यात्मकमलिङ्गम्।
   कुरैन्ति विस्तृतमनुश्रुत्माशु शोषः
   तं सर्वतो विसरणाच्छ विसर्पमाहुः: ॥३॥

   The *doṣas* located in the skin, muscles and blood getting vitiated, spread into all parts of the body without getting localised and produce characteristic symptoms. They quickly produce widespread and unelevated inflammation. Because of its (inflammation) spreading nature all over it is called *visarpa* (spreading cellulitis).¹

4. Cellulitis of Vāta Origin

   वातात्मकोर्दित्सुः: पत्पोद्धरस्मि—
   सम्भेतोदयवनवरलिङ्ग्युक्तः।

1. Commonly regarded as *erysipelas*. 
5. Cellulitis of Pitta Origin

(Cellulitis) of *pitta* origin progresses rapidly, has fever, burning sensation, suppuration, tearing sensation, numerous blisters and is reddish like blood. When the muscles and vessels get destroyed by the aggravated *doṣa* and the colour becomes muddy, like collyrium, that cellulitis becomes incurable.

6/1. Cellulitis of Kapha origin

(Cellulitis) of *kapha* origin spreads slowly, suppurates late, is smooth and whitish, is associated with oedema, mild pain and severe itching.

6/2. Cellulitis due to Combined Doṣas

1. *Blisters as produced by fire cautery.*
Cellulitis due to vitiation of all (the three) _doṣas_ together has the colour and characteristic pains of the three together, is based internally and is incurable upon suppuration; it is also incurable when the muscles and vessels have been destroyed.

7. Cellulitis of Traumatic Origin

The _pitta_ and _rakta_ afflicting a traumatic ulcer of recent origin in a person having excess of the (vitiates) _doṣas_ produce inflammation. This is black, reddish, is associated with high fever, burning sensation, suppuration, and has blisters all over which are blackish like the lentils of _kulattha_.

8. Prognosis

Cellulitis due to _vāta_, _kapha_, or _pitta_ is curable, whereas those due to all of them together and the traumatic ones are incurable. The (cellulitis) due to _pitta_ and also that due to _vāta_ with the features mentioned before¹ and all those which occur over the vital parts are curable with difficulty.

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¹ Such as blisters in _vāta_ and destruction of muscles and vessels in _pitta_ types.
Sinuses

The irresponsible person who mistakes a suppurated inflammation for an unripe one (deliberately), ignores a suppurated one, or when he allows a lot of pus to accumulate in an ulcer, then that pus having entered into his aforesaid tissues\(^1\), penetrates inside.

Because of its copious flow, it is known as \textit{gati} (track) and as it flows like a drain, it is opined as \textit{nāḍī} (sinus). That is caused by a combined action of the three \textit{doṣas} or due to each one of them seperately, and also due to two together only. The others are due to foreign bodies.

11. Sinuses due to \textit{Vāta} and \textit{Pitta}

The (sinuses) due to \textit{vāta} are rough, have a narrow opening and are associated with pain and excessive foam mixed discharge which occurs more at night.

\(^1\) Skin, muscle and blood.
The (sinuses) due to *pitta* are associated with thirst, burning, pricking sensation, lethargy, fever, and tearing sensation; their discharge is yellow, excessive, hot and occurs during the day.

12. Sinuses due to *Kapha* and Those due to a Combination of two Doṣas Together

ज्या कफादृढःवनाजुर्चिनिपिच्छिलाला
रात्रिस्वतः स्तितिमतिक्षकठिना सकःः ।
दोषद्विमिहितलक्षणद्वारसेः
तिर्थो गतीव्यविरेरितक्रमवस्तु विद्यात् ॥ १२॥

Sinuses due to *kapha* should be known by a very thick, whitish and slimy discharge occurring at nights; these are associated with mild pain and severe itching.

Three types\(^1\) of sinuses due to a combination of two (*doṣas*) should be known by the characteristic features of two *doṣas* concerned.

13. Sinuses due to Combination of the three Vitiated Doṣas

दाह्न्यरक्षनमूच्छन्नक्रमश्रोषा
यस्यां भवन्त्यमिहिताति च लक्षणाति ।
तामाधिरेत् पवनपिताकप्रकोपा-
ढोरामसुखकरीमिव कालरात्रिम् ॥ १३॥

(The patient) in whom the features of burning, fever, breathlessness, fainting and dryness of the mouth occur should be known to be suffering from vitiation of *vāta*, *pitta* and *kapha* together; it is fatal like the night of death itself.

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1. *Vāta-pitta*, *pitta-kapha* and *kapha-vāta*. 
14. Sinuses due to Foreign Body

नष्टं कर्मचिदन्मुग्नमुद्गिरितेशु
स्थायिशु शाल्यमिरितेशु गांति करोति।
सा फेलनिं सत्यमच्छथसृष्टिमिथः
सुण्ण स्वचेत सहसा सज्जात च नित्यम्॥१५॥

In case, the foreign body gets lost at the sites mentioned earlier it quickly produces a sinus locally. Its discharge comes out suddenly along with foam as if churned, is serosanguinous and hot, and is associated with a continuous pain.

15—17. Aetiology and Types of Breast Diseases

यावत्यो गतयो वेषच्च कारणः संभवति हि।
तावत्तः स्तनरोगः स्युः स्त्रीौ तैरेव हेतुभि:॥१५॥
धमनी: संबूतारा कन्यानां स्तनसंतिताः।
दोषावितरणात्तां न भवति स्तनामयः॥१६॥
तासामेव प्रजातां गृहिणिः च ता: गुनः।
स्वभावावेश विवृत्वा जायते संभवत्त्व:॥१७॥

Whatever are the types and the causes of gati (track, sinuses), the same are the types and causes of breast diseases in women.

The exits (openings) of the ducts located in the breasts of girls are closed; thus the doṣas cannot spread and hence breast diseases do not occur in them.

The (breast diseases) are possible only in those women who have delivered and in the pregnant, as the same (ducts) open out physiologically (in them).

18—23/1. Physiology of Milk Secretion

रसप्रसादो मधुः यक्षाहारनिवित्तजः।
क्षत्सदहातू स्तनी प्राप्तः स्तनमित्यभिषेकः॥१८॥
The sweet part of the essence of the well digested food getting into the breast from all over the body is called milk.

As sukra (semen) cannot be visualized even when all parts of body are dissected, (similarly) because of its being spread all over the body (milk) is known to have the characteristics similar to sukra. The same (sukra) is induced by seeing, remembering, hearing the voice of, touching and necking with the desired woman. There, the seminal emission is considered to be caused by fully satisfied mind.

Milk is produced in women similar to that of sukra (in men), originating from the food extracts and induced due to touching, seeing, remembering or taking the child into laps. Here constant affection has been mentioned to be the cause of (milk) discharge.
When vitiated by *vāta*, it (the milk) becomes astringent and floats when thrown in water; when vitiated by *pitta*, it becomes acidic and bitter and yellowish lines are produced (when thrown) in water; when vitiated by *kapha*, it becomes thick and slimy and sinks in water; and when vitiated by all the *doṣas* or by trauma, features of all the *doṣas* are produced.

25. Qualities of Normal Milk

The milk which when thrown in water becomes one with it, which is white, sweet, and without any discolouration is to be regarded as normal.

26, 27. Pathogenesis and Clinical Features of Breast Abscess

The *doṣas* having reached the breasts of women, whether lactating or non-lactating, and then having vitiated the blood and muscles produce diseases of breast.

Except for the *sonita* abscess, the clinical features of all these five (breast diseases) are like the manifestations of external abscesses.

Thus ends the tenth chapter entitled “Diagnosis of Spreading Cellulitis, Sinuses and Breast Diseases” of *Nidāna-Sthāna* of *Suśruta-Saṁhitā*. 
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study to elucidate the mysterious reasoning of including cellulitis, sinuses and breast diseases at one place (S.S.II.10) may be interesting.

2. Cellulitis (3—8) could very well have been erysipelas; mention of traumatic variety further supports this view. A historical study to find out the first recorded description of this disease may bring out new facts.

3. A study to work out the different types of cellulitis (4—8) and correlate them with the clinical conditions and modern terminology may be illuminating; it may be possible to find out the different aetiological agents for these.

4. Similar historical and comparative study of sinuses (9—14) and study to correlate them and the specific discharge with modern clinical terminology may be undertaken.

5. An attempt should be made to find out the system who emphasized first that the breast ducts in girls are not open (16) and hence diseases do not afflict this organ in them.

6. Physiology and pathology of breast milk as mentioned (18—25) would be worth elucidating further.
CHAPTER ELEVEN
NIDĀNA-STHĀNA
SUMMARY

This chapter deals with the etiology, pathogenesis and clinical features of glandular swellings, lymphadenitis, tumours and goitres.

Circular knotted inflammatory swellings have been defined as *granthis* (3); five types of these have been described (4–9). The description of *granthi* caused by *meda* could be that of a sebaceous cyst or a lipoma (7). Swellings connected with the blood vessels have also been included (8, 9).

Lymphadenitis occurring in the cervical and axillary regions have been described as *apaci* (10-12). Matted character of lymph nodes has been aptly compared to spawn of the fish and its chronic course has been well emphasized (10-12).

Non-suppurating, slow growing and circular swellings with little pain have been defined as *arbuda* (tumours) (13-15/1); six types of these have been described. Multiple tumour formation has been described as of bad prognostic sign (20).

Goitres (22-29) have been described as swellings occurring in the neck with the bilobed shape of a scrotum. Three varieties of goitres have been described. Goitres causing dyspnoea, emaciation and hoarseness of voice (thyroid carcinoma) have been mentioned as incurable. Some features of myxoedema, retrosternal goitre and thyrotoxicosis have also been mentioned.
Chapter Eleven

1. अथातो ग्रन्थपच्चयौऽव्यवगालगण्डानां निदानं व्याख्यायः: ॥१॥

Now we would expound upon “The Diagnosis of Glandular Swellings, Cervical Lymphadenopathy, Tumours and Goitres”.

2. यथोवाच्च भगवान् तन्भक्तिः ॥२॥

As was described by Lord Dhanvantari.

3. Pathogenesis of Granthi (Glandular Swelling, Cyst etc.)

वातावयो मांसस्वम संहट्टा: संहार्य मेदश्च कफानुविद्यम्।
बृत्तोपति विप्रतिं तु शोभं कुष्टल्यतो ग्रन्थिरिति प्रक्रिष्टः। ॥३॥

When the deranged vāta etc. vitiate the māṁsa, ṣoṇita and meda mixed up with kapha they produce circular, raised and knotted inflammatory swellings called granthi.

4. Vātika Granthi

आयम्यते व्याक्यत एति तोवं प्रत्यत्ते कुष्टत एति मेदम्।
कुष्टोमूलस्वर्तितिवाततत्वं भिन्न: स्ववेच्छानिलजोश्यसमच्छम्। ॥४॥

The granthi of vāta origin produces a feeling of stretching, pain, pricking and (falling) as if being thrown and also cutting and tearing pains. It is black and hard and is like a bladder distended with air and when burst, discharges sero-sanguinous fluid.
5. **Paittika Granthi**

And the *granthi* due to *pitta* produces a sensation of severe burning, fuming, sucking, throbbing and as if being burnt to ashes. It is red and/or yellow and when burst, discharges hot and excessive amount of blood.

6. **Kaphaja Granthi**

The (*granthi*) due to vitiation of *kapha* produces a cold swelling without any discoloration associated with mild pain and excessive itching having the consistency of a stone.

It increases slowly and when burst, white and thick pus is discharged.

7. **Meda Granthi**

The (*granthi*) due to *medas* increases or decreases according to the increase or decrease of (fat) in the body; it is smooth, big in size and is associated with mild pain and excessive itching; and when burst it discharges fat which is similar to oil-cake and *ghee*.

8, 9. **Sirāja Granthi (Swelling of Vascular Origin)**

The *granthi* due to *medas* increases or decreases according to the increase or decrease of (fat) in the body; it is smooth, big in size and is associated with mild pain and excessive itching; and when burst it discharges fat which is similar to oil-cake and *ghee*.

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A weak person who undertakes excessive exercise gets his network of veins affected due to vāyu which in turn compresses, squeezes and dries it up and produces granthi quickly which is raised and circular.

The granthi, originating in the veins becomes curable with difficulty, if it is associated with pain and is mobile. If it is painless, and also fixed, big in size and situated over the vital spots, it should be discarded (from treatment).

10—12. Apaci (Cervical and Axillary Lymphadenitis)

The medas and kapha collected in the regions of mandible, axilla, clavicle, shoulder joint, posterior and anterior cervical regions produce granthis which are fixed, extensive, circular in shape, smooth and associated with mild pain.

Some of these swellings are of the size of kernel of āmalaka while others are like the spawn of fish in shape. They are of the same colour (as skin) and are progressively increasing and because of the continuous growth they are called apaci.

They are associated with itching and mild pain; when burst they discharge, and disappear while others appear. This disease caused by medas and kapha is difficult to treat and lasts for several years.
Tumour

The *doṣas* having got vitiated in any part of the body and afflicting the *māṃsa* produce swelling in the latter. This (lesion) is circular, fixed, slightly painful, big in size, broad based, slowly growing and it does not suppurate; the same is called *arbuda* by the experts of this science. This is produced by (vitiated) *vāta, pitta* and *kapha* and by *rakta* and *māṃsa* and also by *medas*. Its clinical features are always like that of *granthi*.

Raktārbuda

The vitiated *doṣas* compressing and contracting the *ṣonita* and vessels without undergoing suppuration and alongwith the discharge make the muscular lumps prominent. This is studded with fleshy buds and increases rapidly. This continuously discharges vitiated blood and is incurable and is known as *raktārbuda*. Because of the complication of haemorrhage the patient with this tumour becomes anaemic.

Māṃsārbuda

The diminution of the lesion in *māṃsa* is counted as *prdrūḍt* *prakāraṇa* *shoṣa*.

*Abheda* *ṣćeṣṭa* *pradharmanandayam* *pāma* *pradharmanandayam* *pradharmanandayam*.

The diminution of the tumour makes the body strong and regains its strength.
Due to fist blows etc. the muscles of injured parts get vitiated and swollen. This is painless and smooth, is of the same colour (as skin), is non-suppurating, is like a stone and is fixed. This vitiated muscle increases much more in the non-vegetarian. This is "maṁśārbuda" and is said to be incurable. Even out of those which are curable, those which discharge, those situated over the vital parts or over the srotasas and those which become fixed, should be discarded from treatment.

20. Multiple Tumours

Yajñāyate canto haṁ ca purva-jāteḥ śeṣeṇa tadbhūtasyaḥ bhūvaṁ.
Yadbhuvaṁ yugapat kramāha hirvaṁ tachch bhedaśāyam.

When another tumour grows over the pre-existing one, that is known as "adhyārbuda" by the oncologist. When two tumours grow simultaneously or one after the other, that is called "dvirārbuda", and both these are incurable.

21. Non-suppuration of Tumours

N pākamāyātanta kaphādiśakṣatvāmedodhāvātāchār viśeṣatāttaṁ.
Dvopālayatvātu prāyanaścār tēvaṁ sarvabhairāvē naṁśaṁ taṁ.

All tumours by nature do not undergo suppuration because of preponderance of "kapha" in them and specially because of the preponderance of "medas" and also because of the immobilization and knotting of the "dōṣas" in them.

22. Goitre

Vāta: kaphātva galo pravṛttāṁ maṁ ye tu samśāntaṁ viśeṣaṁ.
Kurvatāṁ gandha kramāha: sthālināṁ: sāmaṇḍitaṁ tāṁ gālagnādhamāḥātha.
Vāta and kapha having aggravated in the neck and having accumulated in manyā and alongwith medas produce glandular enlargements with their characteristic symptoms. It is known as goitre (galagaṇḍa).

23, 24. Vātika Goitre

The goitre originating due to (vitiating) vāta is black or red, is associated with pricking pain and is full of blackish veins. And when medas combines with it or collects there in due course of time, the same (goitre) becomes very smooth and painless.

It is hard, increases gradually in size and does not suppurate; however, it rarely suppurates for unknown reasons. Loss of taste in the mouth and dryness of palate and throat occur in that person.

25, 26/1. Kaphaja Goitre

The goitre due to (vitiating) kapha is fixed, is of the same colour as skin, has mild pain and excessive itching. It is cold and big in size, increases slowly and after a long time, rarely suppurates and has mild pain. Taste of the mouth becomes sweet in that person and the palate and throat feel as if pasted.

26/2—27. Medaja Goitre

The goitre due to (vitiating) medas is white and cold in colour, has astringent taste and knowable, grows soft in the neck and is mildly painful. The aggravaion is due to astringent taste in the mouth and dryness in that person.
28. The Incurable Goitre

The patient of goitre who breathes with difficulty, whose whole body has become flaccid\(^3\), whose disease has lasted more than a year, who has anorexia, is emaciated\(^3\) and has hoarseness of voice\(^4\) should be discarded from treatment by the clinician.

29. Definition of Goitre

Goitre has been defined as the swelling, big or small, which hangs like scrotum in the neck.

Thus ends the eleventh chapter entitled “Diagnosis of Glandular Swellings, Cervical Lymphadenopathy, Tumours and Goitres” of the Nidāna-Sthāna of Suśruta-Saṁhitā.

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1. Stridor as a pressure symptom from tracheal compression due to retrosternal or massive goitre.
2. \(?\) Myxoedematous.
3. \(?\) Thyrotoxicosis.
4. \(?\) Recurrent laryngeal nerve involvement due to carcinoma.
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study of the diseases mentioned in this chapter e.g. tumours, goitres, lymphadenitis etc. with other systems of medicine should be done.

2. Doṣika etiology (13-19) of the formation of tumours could be studied with benefit. Exact cause of neoplastic growth is largely unknown yet.

3. A study of the doṣika etiology (22-27) in the formation of idiopathic goitre or thyroid swellings could be carried out.

4. A study could be undertaken to establish the clinical identity of the diseases mentioned in this chapter.
CHAPTER TWELVE
NIDĀNA-STHĀNA

Diagnosis of Scrotal Swellings, Venereal Diseases and Elephantiasis
SUMMARY

This chapter deals with the etiology, pathogenesis and clinical features of scrotal swellings, venereal diseases and elephantiasis.

Pathogenesis and prodromal symptoms of seven types of scrotal and inguinoscrotal swellings (3-5) have been described including hydrocele, filarial scrotum and hernia. The descent of intestines into the scrotum and its reduction with a gurgling sound has been emphasized among the clinical features of hernia as also sudden increase of intra-abdominal pressure as an important etiological factor (6).

Five types of venereal diseases (7-9) have been described. The description includes various types (8) of specific as also nonspecific lesions of the genitals. Unhygeinic conditions of the genitals and physical trauma also have been mentioned as etiological factors (7).

Three doṣika types of elephantiasis have been described (10), although predominance of kapha in all types has been emphasized. It has been mentioned that elephantiasis was endemic in marshy lands which is significant (14). Elephantiasis of hands has also been described (15). Chronic elephantiasis of more than one year's duration has been considered incurable (12).
Chapter Twelve

1. अयातो वृद्धचुपवंशलीपदानां निदानं व्याह्यास्यामः॥१॥

Now we would expound upon “The Diagnosis of Scrotal Swellings, Venereal Diseases and Elephantiasis”.

2. यथोवाच भववात् धनवत्तरि:॥२॥

As was described by Lord Dhanvantari.

3, 4. Scrotal Swellings: Pathogenesis

वातपितःश्लेष्यशोणितादेवृष्णान्त्रितिमिता: सप्तवृद्धयो भवति।
तासां मूत्रान्त्रितिमिते बृह्दी वातसमुत्थे, कैवल्मुत्पतिः तु नरसन्यतमः॥३॥

अथ: प्रकुपितोन्यन्तमो हि दोषः फलकोशवाहिनीरिविप्रपद्ध धमनीः:
फलकोष्योद्वृद्धजनयति, तां वृद्धिमित्याचक्षते॥४॥

The seven types of scrotal swellings (vṛddhi) are due to vāṭa, pitta, kapha, sōṇita, meda, mūtra and āntra. Out of them, the scrotal swellings due to mūtra (urine) and āntra (intestines) are also associated with increased vāṭa, the only difference being in their immediate aetiological factors.

Any one of the doṣas having got vitiolated in the lower portion, enters the channels of scrotum and produces its swelling: the same is called vṛddhi.

1. Urine like fluid in mūtra-vṛddhi (hydrocele) and intestines in āntra-vṛddhi (hernia).
2. Lower half of abdomen.

१२
5. **Prodromal Features**

Their prodromal features would be: pain in the bladder, waist, testes and penis, obstruction to passage of flatus and swelling of scrotum.

6. **Clinical Features**

(i) That (swelling) which is distended like a bladder full of air, is hard and which produces vātaja pains without any reason is the scrotal swelling of vāta origin.

(ii) That which is coloured like a ripe udumbara fruit, is associated with fever, burning, hot sensation and which appears and gets inflamed quickly is the scrotal swelling of pitta origin.

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1. Acute epididymo-orchitis.
(iii) That which is hard, has mild pain, is cold and is itching is the scrotal swelling of ślesma origin.\(^1\)

(iv) That which is soft, glossy and itching with mild pain, and which shines like palm fruit is the scrotal swelling of meda origin.\(^3\)

(v) That which is covered with blackish blisters and is associated with the features of pittaja vyddhi is the scrotal swelling of raktā origin.\(^3\)

(vi) Mūtraja scrotal swelling occurs in them who habitually withhold urine; it swings like a water drum while walking and dysuria, pain in both the testes and oedema in the scrotum are produced; that is known as the scrotal swelling due to mūtra.\(^4\)

(vii) Due to carrying heavy weights, fighting with stronger opponent, fall from a tree etc. and other special strains, the vāta gets vitiated and aggravated and having afflicted a part of the large bowel or of the other one (small bowel) goes down and reaches the hip joint regions\(^5\); then remaining there like a glandular swelling it enters the scrotum like a distended bladder. On squeezing it goes up (reduces) with a gurgling noise and on releasing, it again swells (reappears). This is called hernia (āntravyddhi) and is incurable.\(^6\)

7. Venereal Diseases: Pathogenesis

1. ? Chronic epididymo-orchitis.
2. Haematocele.
3. ? Filarial scrotum.
5. Inguinal region.
6. Inguinal hernia.
Due to excessive sexual intercourse, or due to prolonged celibacy, intercourse with a woman observing excessive abstinence\(^1\) or with one who has been discarded (by her folks) for a long time, or with a woman who is menstruating, who has long hairs\(^8\), rough hairs, dense hairs, or who has hairs in the internal parts, or with one whose vaginal orifice is too small or too large, or with one who is not loved or who does not like sex, or one who has washed the genitals with dirty water or one who has not washed the genitals, or the one having genital diseases and intercourse with the one usually having distorted and infected genitals and in those men who enjoy such women excessively and because of the injury due to nails, teeth, poison or śūka\(^3\), due to tying (of the penis), due to injury during masturbation, intercourse with female quadrupeds, due to washing the penis with dirty water, squeezing it, due to suppressing the discharge at the end of the intercourse or not washing the penis (at the end of intercourse); vitiated doṣas reaching the penis produce oedema with or without an ulcer; that is known as upadāṁśa.

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1. Due to abstinence for a long time, the genital parts and vaginal orifice get excessively contracted; intercourse with such a lady would cause venereal diseases—Dalhanya.

2. Hairs over the genitals.

8. **Types of Venereal Diseases**

That *(upadāṁśa)* is of five types; due to the three vitiated *dośas* separately, all combined together and that due to (vitiated) blood.

**Clinical Features**

Now, in *upadāṁśa* caused by (vitiated) *vāta*, roughness, cracks in the skin, rigidity in the penis, induration, and different types of *vātika* pains\(^1\) occur.

In *upadāṁśa*, caused by *pitta*, fever, oedema, redness like that of ripe *udumbara*, excessive burning, early suppuration and *paṭṭika* pains\(^2\) occur.

In *upadāṁśa* caused by *kapha*, oedema, itching, hardness and glossiness and *śleṣmika* pains\(^3\) occur.

In *upadāṁśa* caused by *rakta*, appearance of black blisters, tendency for excessive bleeding, *paṭṭika* features, excessive fever, burning and dryness occur; this is sometimes relievable.

In *upadāṁśa* caused by all the *dośas* (together), features of all the *dośas* are seen, tearing of penis occurs, growth of organisms takes place and death results.

1. Neuralgic pains.
2. Burning pains.
10. **Elephantiasis: Pathogenesis**

The vitiated doshas, vāta, pitta and kapha having gone down and having got into the waist, thighs, knees, and legs and in due course of time having got located into the feet slowly, produce swelling; that is called as ślipada (elephant’s feet).

That is of three types—due to vāta, pitta and kapha.

11. **Clinical Features of Elephantiasis**

In (elephantiasis) due to vāta, skin becomes uneven, black, rough, with many cracks and vātika pains occur without any reason.

In (elephantiasis) due to pitta, yellowishness, slight softness, fever and burning often occur.

In (elephantiasis) due to kapha, whiteness, glossiness, mild pain, heaviness and big glandular enlargements occur and skin gets studded with thorns.

12. **The Incurable Elephantiasis**

That (elephantiasis) which is one year old, is too extensive, is like an anthill, and that which discharges should be discarded (from treatment).
13. Predominance of Kapha in Elephantiasis

Though the elephantiasis is due to the three 

14. Climatic Endemicity of Filaria

Elephantiasis occurs specially in those places where there is always a collection of stagnant water and dampness round the year.

15. Elephantiasis of Hands

Elephantiasis is produced in the hands also as in the feet of human beings. Some experts say that it occurs in the ears, eyes, nose and lips also.

Thus ends the twelfth chapter entitled "Diagnosis of Scrotal Swellings, Venereal Diseases and Elephantiasis" of the Nidāna-śthāna of Suśruta-Saṃhitā.
Suggested Research Problems

1. The clinical features described are very suggestive of the identity of the diseases today. A historical and comparative study of these diseases in other systems of medicine would be of value.

2. Specific mention of hydrocele, hernia and filarial scrotum (6) point to their prevalence in those days. A historical study on the early recorded descriptions of these diseases may bring out new facts.

3. Lack of sexual hygiene and trauma due to improper technique or otherwise have been mentioned as the etiological factors of venereal diseases which can be said to be somewhat true even today. An intact mucous membrane is an effective barrier to any infective organism. This may be the first recorded description of venereal diseases. A historical study in this regard may be useful (7).

4. Association of swamp and elephantiasis is very significant. A study on the early records of this disease regarding the etiological factors in other systems would be interesting (14).
CHAPTER THIRTEEN
NIDĀNA-STHĀNA

Diagnosis of Minor Diseases
SUMMARY

This chapter deals with the etiology, pathogenesis and clinical features of forty-four unclassified minor diseases. The description includes various congenital (41–44), inflammatory and neoplastic (27, 28/1) lesions of the skin and its appendages, acute lymphadenitis (14–17), phimosis (52/2–54), paraphimosis (47/2–50/1), anal stricture (55, 56) and rectal prolapse (61). The clinical and prognostic features of some of the diseases could have been of eruptive fevers (38) and plague (20).
Chapter Thirteen

1. अयात: क्षुद्ररोगाणां निवान्त व्यासास्याम्:।११।

Now we would expound upon "The Diagnosis of Minor Diseases."

2. यथोवच भगवान्न धन्वन्तरिः।२१।

As was described by Lord Dhanvantari.

3. Enumeration

समसेन चुशस्वरारित्वतु क्षुद्ररोगा भवति। तथाया—अज-गलिका, यवप्रथ्या, अन्वालजी, विबृता, कच्छपिका, वलमीकं, इद्वृद्धा, पनसिका, पायाणगिरम्, जालगांवः, कक्ष, विस्फोटकः, अन्तरो-हिणी, चिंप, कुन्कन, अनुशायी, विवारिका, वर्कराबुंद, पामा, विर्चितका, रक्षा, पाववारिका, बड़ी, अलेसन्द्रलुप्तः, दार्हणकः, अरशिका, पलित, मसूरिका योवनपिङ्क, पतिनोक्ष्ठः, जतुमणिः, मशकः, चर्मकीलः, तिलकालः, न्याच्छ, भुजः, परिवर्तिका, अवपाटिका, निम्नप्रकाशः, संस्तिहुटुः, अहिपुतनं, वृषणकुचः, गुद्धंशश्चेति॥३॥

The minor diseases are forty-four in number in all. They are:

1. Ajagallikā
2. Yavaprapkhyā
3. Andhālajī
4. Vivrātā
5. Kacchapikā
6. Valmika (actinomycosis)
7. Indrawyddhā
8. Panasikā
9. Pāśāṅagardabha
10. Jālagardabha
11. Kakṣā
12. Visphoṭaka
13. Agnirohiṇī
14. Cippa (whitlow)
15. Kunakha (paronychia)  
16. Anuśayi
17. Vidārikā  
18. Šarkarārbuda
19. Pāmā  
20. Vicircikā
21. Rakasā  
22. Pāḍadārikā (rhagades)
23. Kadara  
24. Alasa
25. Indralupta (alopecia)  
26. Dāruṇaka
27. Arunṣikā  
28. Palita
29. Masūrikā  
30. Yauvanapiḍakā (pimples)
31. Padminīkaṇṭaka  
32. Jatumaṇi
33. Maṣaka  
34. Carmakila (warts)
35. Tilakālaka  
36. Nyāsaṅka
37. Vyāṅga  
38. Pariṇaṅgikā (paraphimosis)
39. Avapāṭikā  
40. Niruddhaphraṇaśa (phimosis)
41. Sanniruddhaguda  
42. Ahipūtana (napkin rash)  
(anađ stenosis)
43. Ūṣṇakauku and  
44. Gudabhvanśa (rectal prolapse)

4. Ajagallikā

हिन्दी शब्द सर्वां प्रसिद्धा सेरजा मुंगसद्रिया।
कष्ठाततैतरिता जेया वलानामस्मितां कल्लकां।

Ajagallikā should be known to occur in children, is produced by vitiated kapha and vāta, is glossy, has same colour as that of skin, is knotted, painless and is like a mudga.

5. Yavapraṇāhā

यवाकारा मुक्क्तिन प्रपटिता मातस्मितिः।
पिण्डका श्लेष्मवाताः ग्यावप्रक्षेति सीघ्ये।

That eruption is called yavapraṇāhā which is produced by kapha and vāta, is of the shape of barley¹, is very firm, knotted and is located in the muscles.

¹. Spindle shaped.
6. **Andhālajī**

वनामवकां पिडकामुख्यतं परिमण्डलाम्।
अन्धालजोमत्यूयां तां विद्यात् कपावतज्जाम्।।6॥

That swelling is known as *andhālajī* which is due to *kapha* and *vāta*, is firm, without a punctum, raised, circular and contains little pus.

7. **Vivṛtā**

विवृतान्यं महावाङ्गम पक्वोदमुंग्मसप्रिस्ताम्।
विवृतामिति तां विद्यात् पितोल्यां परिमण्डलाम्।।7॥

That is known as *vivṛtā* which arises due to *pitta*, has a wide mouth, excessive burning, has the colour of a ripe *udumbara* fruit and is circular.

8. **Kacchāpikā**

प्रतिता: पञ्च वा पञ्चवा दायणा: कच्चपीक्षेऽः।
कपालिनाम्यान्य पिडका तेजा कच्चपिका बुधः।।8॥

The wise call those swellings as *kacchāpikās* which are due to *kapha* and *vāta*, are knotted, five or six in number, are hard and have a hump like that of a tortoise.

9, 10. **Valmīka**

पाणिपालनस्य समी ग्रीवायासूचवंजन्यविनः।
प्रम्प्रेतांसि कव्रक्कुल्ल समी: समुप्रचोलते।।9॥
तोथतवर्षीयाः कच्चपीक्र्युमस्यकंपावर्त्तः।।
व्याघिर्वेक्षकं इत्येक्क कच्चपितालिकोढवः।।10॥

That disease is *valmīka* which is due to *kapha*, *pitta* and *vāta*, which arises on the surfaces of palms and soles, in the joints of neck, and in the regions above the clavicles, is knotted.

1. *Actinomycosis, Madura Foot.*
like an anthill, increases slowly and in which pricking pain, 
soddening, burning sensation and itching occur around the 
openings.

11. **Indravṛddhā**

पद्मपुष्करवत्त्मये पिडकाविम् समाचिताम्।  
इन्द्रवृद्ध्य तु तां विधािािापतितोत्तिम्यां भिषक्क॥११॥

The physician calls that *indravṛddhā* which arises due to 
vāta and *pitta* and is full of small boils in the centre as in 
a lotus fruit.

12/1, 2. **Gardabhikā**

मण्डलं वृत्तमुन्त्समं सरक्तं पिडकावितम्।  
रुजाकरों गार्ताकमां तां विधािािापतित्सजाम्॥

Those eruptions are known as *gardabhikās* which are pro-
duced by vāta and *pitta*, are circular, raised spherically, full 
of blood and produce pain.

12/3, 4. **Panasikā**

कणाँ परि समन्ताहाम पृष्ठे वा पिडकोपरुस्क्।  
शालाकवत्त्सकां तां विधािािािलेम्वातिजाम्॥१२॥

That swelling is known as *panasikā* which is due to *kapha* 
and vāta, occurs on the ears or around them, or on the back, 
has severe pain and is like the root of a waterlily.

13. **Pāsāṇa-gardabha**

हनुस्म्रेयो समुद्भुतं शोफलयर्जं स्थिरस्म्।  
पाधार्द्विमं विधािािािािवनात्मकम्॥१३॥

1. ? *Parotitis*
That is known as *pāṣāṇagardabha* which arises due to *kapha* and *vāta*, occurs in the region of temporomandibular joints, has inflammation, mild pain and is fixed.

14. Jāla-gardabha

विसर्पवत्त सर्पति यो बाहुच्छकरसति:।
अपाकः व्ययुः: पित्तातु स जेयो जालगर्वन्म॥१४॥

That is known as *jālagardabha* which is produced due to *pitta*, spreads like cellulitis, produces burning sensation and fever, is slender, non-suppurating and is oedematous.

15. Irivellikā¹

पिठिकामूलसात्मकञ्चणां बङ्गामुखां जालगर्वाणां।
सर्वाभ्यं कर्णक्षडः जानीयादिरितिबिक्षुः॥१५॥

That swelling should be known as *irivellikā* which is due to all the three (*vāta, pitta and kapha*), has the features of all (the vitiated *dosas*), is situated in the head, is circular and has severe pain and fever.

16. Kakṣā

बाहुपालवसिक्षक्षासु कुर्णफोटां सवेदनामाः।
पित्रप्रकोपसमूहां क्षामिता विनियोदये॥१६॥

That should be known as *kakṣā* which is due to vitiation of *pitta*, occurs in the arms, lateral chest wall, shoulder and axilla, has black blisters and is associated with pain².

17. Gandhanāmā (subvariety of *Kākṣā*)

एकांमवंविघां दृष्ट्वा पिठिकां स्फोटसिरिमामाः।
त्वगतां पित्रापेन गन्धनामां प्रवचन्ते॥१७॥

1. *This disease, however, has not been enumerated in the beginning.*

2. *Axillary lymphadenitis.*
In the same way another swelling seen with blisters of similar colour situated in the skin, due to vitiated *pitta* is called *gandhanāma*.

18. **Visphoṭaka**

They are known as *visphoṭaka* which are due to *pitta* and *rakta*, occur at one place or all over the body, have blisters similar to those produced by fire cautery and are associated with fever.

19, 20. **Agnirohiṇī**

That is known as *agnirohiṇī* which is due to all (the three *doṣas* i.e. *vāta*, *pitta* and *kapha*), which produces blisters in the region of axilla, tears the muscles, gives rise to burning sensation internally, and fever, is coloured like a blazing fire, kills the person in a week, ten days or fortnight and is incurable.

21, 22/1. **Cippa (Whitlow)**

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1. Lymphadenitis, high fever and rapidly fatal course of the disease are characteristic features of bubonic plague which it could very well have been.
That disease is known as cippa which is due to pitta and vāta, occurs in the nail and nail bed, is painful and produces burning and suppuration. This is also called aksata disease and is synonymous with upanakha.

22/2, 23/1. Kunakha (Paronychia)

अभिघातात् प्रत्युष्टो यो नक्षोभिसितः हरः \[22\, 23\]
भवेत् कुनकं विभात् कुलीनमिति संज्ञितम्।

That nail which is damaged by trauma, is dry, blackish and rough is known as kunakha and is called as kulina.

23/2, 24/1. Anuśayī

गम्भीरामल्यसंरंभो सचर्णमुपरिस्थिताम् ॥ २३॥
कफावलत: प्रपाकां तां विद्याबन्धायो भिषक्।

The physician should recognise that as anuśayī which is due to kapha, occurs on the head, is deep, mildly oedematous, is of the colour of skin, and suppruates internally.

24/2-25/1. Vidārikā

विवारीकनवहृतां कक्षावक्षणसन्धिः ॥ २४॥
रक्तं विवारिकां विभात् सर्वजं सर्वलक्षणाम्।

That is known as vidārikā which is due to all (the three vāta, pitta and kapha) and has the features of all the dosas, occurs within the folds of axillae and groins, is circular like the bulb of vidāri and is reddish.

25/2-28/1. Śarkarārbuda

प्राण्य मांससिरास्नायु शलेभमा मंदस्तथागिनिल: ॥ २५॥
प्रण्य कुबर्ति निशोपसी मधुसुपिरवसानिभम्।
श्वत्यास्नायमत्थ्यं तत्र वृद्धं गतोगिनिल: ॥ २६॥
मांसं विशोष्य प्रयितां शकरां जनयेत् गुदः।
Muscles, vessels, ligaments, kapha, fat and vāta mixing together produce glandular swellings upon the bursting of which an excessive secretion similar to honey, ghee and fat is discharged; then, vāyu having increased, and having atrophied the muscles produces concretions in the gland again. Bad odour, excessive soddening, and sudden discharge of blood of various colours occurs from the vessels; that is known as šarkarārbuda.  

28/2.  
Pāmā, vicarcikā, and rakasā have been described with kuśtha diseases.  

29.  
Pādādārika (Rahagades)  

In the excessively dry feet of those who do a lot of walking, the vāyu getting located in the soles produces painful fissures.  

30, 31.  
Kadara (Corn and Callosity)  

When the feet get traumatised repeatedly by gravels or injured by thorns etc. the vitiating doṣas following the meda and  

1. Dermoid or Sebaceous cysts.
rakta produce kadara in human beings; these lesions have a central core, are hard, knotted, depressed or else elevated in the centre, are about the size of a seed of plum, are painful and have a discharge.

32. Alasa

बिलब्राः ल्यन्तरो पादौ कण्डुदाहसमसिततौ।
बुष्टकर्वसस्मस्सशांतसं तं विनिदिशेत्।॥3.21॥

That is called alasa which occurs in the sodden interdigital clefts of feet coming into contact with dirty mud. They are associated with itching, burning and pain.

33, 34. Indralupta (Alopecia)

रोमकृपानुम पितं बालेन सह मूच्छितम्।
प्रच्यावयति रोमाणि तत: इलेहमा समोणित:।॥3.3.॥
रुणाद्ब रोमकृपासं ततोज्येष्ठासमस्ंभवः।
तविन्नातुतं खालितं रुणेति च विभावयते।॥3.4.॥

Pitta combining with vāta and getting into the pores of hairs (hair follicles) causes fall of hairs; then kapha along with rakta obstructs the pores of those hairs and makes it impossible for other hairs to grow. That is known as indralupta, khāliya or rujyā.

35. Dārunaka

वारणा कण्डुरा रूक्षा केशमूमि: प्रपाटचते।
कफवातप्रकोष्ण विद्यात्वारणकं तु तमः।॥3.5.॥

That should be known as dārunaka, in which the scalp becomes hard, itching, dry and fissured due to aggravation of kapha and vāta.
36. Arunṣikā

अरुणिका बहुवक्तापी बहुवल्लोदन नूढनि।
कषासूक्तिकोपेन नूणं विहारवर्षिकाम्।।३६।।

When excessively sodden lesions having multiple openings are produced in the head of human beings due to vitiation of kapha, rakta and organisms, that should be known as arunṣikā.

37. Palita

कौशोकश्रमक्ति शरीरोपम शिरोगत:।
पित्तं च केशान् पचति पलितं तेन जायते।।३७।।

Warmth produced by anger, grief and exertion in the body, having gone to the head, as also the pitta, mature the hairs; palita (grey hairs) is thus produced.

38. Masūrikā

बाहुवर्षावन्तस्तम्भः स्फोटः सपीतकः।
गात्रेु वदने चाल्लाद्रेाल्ला मसूरिकः।।३८।।

Blisters which are coppery as well as yellowish and are found all over the body and on the face as well as within the oral cavity and which are associated with burning sensation, fever and pain are known as masūrikā.

39. Mukhadūṣikā (Pimples)

शाल्मलिकष्ठकप्रस्यः कप्फमासितशोणिते।
जायते पिडका युन्तां बचे या मुखदुष्किकः।।३९।।

The boils which are produced in the face of the young, which are like the thorns of śālmaṭi and which are due to kapha, vāta and rakta are mukhadūṣikās.

1. ? Eczema of the scalp.
2. Generalized coppery eruptions with high fever are the features of small pox. This description could have been of small pox and other eruptive fevers.
40. Padmini-kaṇṭaka

That is known as padmini-kaṇṭaka which is full of thorns, is circular, itching, has a yellowish periphery and is like the thorns of padmini; this is produced by kapha and vāta.

41. Jatumaṇi

That lesion which is painless, raised evenly, circular, produced by kapha and rakta, is hereditary, reddish and smooth is called jatumaṇi.¹

42. Maṣaka

Those eruptions which are seen all over the body, are painless and fixed, are raised and blackish, like pulse of māṣa and are due to vāta are called maṣaka.

43. Tilakālaka

Those eruptions which are blackish, are of the size and shape of sesamum, are painless, and are due to drying up of vāta, pitta and kapha are known as tilakālaka.

¹ Moles or birthmarks.
44. *Nyaccha*

Those circular eruptions on the body which are big or small, blackish or whitish, which are hereditary and painless, are called *nyaccha*.

45/1. *Carmakila*

Because of similarity in the pathogenesis and diagnosis, *carmakila* has already been described.\(^1\)

45/2-47/1. *Vyaṅga and Nilikā.*

The *vāyu* aggravated by anger and exertion in combination with *pitta*, reaching the face suddenly produces circular patches there, which are painless, small in size and blackish and are called *vyaṅga*.

Eruptions in the body and the face with same features (as *vyaṅga*) but blackish in colour are known as *nilikā*.

47/2-50/1. *Parivartikā* (Paraphimosis)

2. *S. S. II. 2. 18–20.*
तदा वातोपस्सुष्टं तु चर्म प्रतिनिविष्टते ।
मणेरच्छस्तात् कोशालच प्रभिध्रुप्येण लम्बते ॥४८॥
सबेदनः सबाहस्र पांच च चक्रति कथितः ।
मारुतगमनूसंबूतां विधातां परिर्वतिकाः ॥४९॥
सकण्डः कठत्ता चापि सेव इश्लेषसमुख्ता ।

Due to excessive rubbing and squeezing and also due to excessive trauma, when the all pervading (vāyāna) vāyu comes to the skin of the penis, the vāyu having got located there retracts the skin leaving the glans below; and then the prepuce swells up like a gland. In some it is associated with pain, burning and suppuration. This is produced by vāta and the external factors (such as trauma etc.) and is known as parivartika. If it is associated with itching and is hard, the same should be known to have arisen due to kapha.

50/2-52/1. Avapāṭikā (Prepuclial tears)

अल्पीयःक्षा यदा हर्षावलां गच्छेति क्त्रयः तरः ॥५०॥
हस्ताभिस्थाताः ध्रुवं चर्मप्रपुंऽस्तिते बलात् ।
मव्यातिपनातापिषु मृकुगोविधाता ॥५१॥
वस्यास्वापनाते चर्म तां विधावधवास्तिकाः ।

When an excited man does sexual intercourse with an adolescent girl having narrow vaginal orifice, or due to manual trauma, the foreskin gets forcibly retracted or due to rubbing, squeezing or also due to suppressing seminal discharge, penile skin gets torn; that is known as avapāṭikā.

52/2-54. Niruddhaprakāśa (Acquired Phimosis)

वातोपस्सुष्टस्मेव तु चर्म संथथ्यते मणिम ॥५२॥
मणिस्चर्ममोचनन्तरु मूकरोतो रुणद्विच ।
निर्ज्ञप्रकोर्त्तस्मिनमन्दवधारमवेदनम् ॥५३॥
When the vāyu having got vitiated and located in the prepuce and the glans, produces adhesions between the two, the urinary passage gets obstructed. With the passage getting narrow he passes thin stream of urine without pain and the glans cannot be exposed. This is also known as niruddha-prakāśa and is also due to improper healing of avapāṭikā.

55, 56. Sanniruddhaguda (Anal Stenosis)

Due to suppression of the evacuatory processes, the vāyu gets vitiated and having got located in the rectum, obstructs the large bowel and narrows its external opening. Due to the smallness of the passage, the faeces are passed with difficulty in the person and this disease is known as sanniruddhaguda and is curable with difficulty.

57, 58. Ahipūtana (Napkin rash)

When the faeces and urine are present near the anus which has not been cleaned with water and in those infants to whom even after perspiration a bath has not been given, itching is produced due to rākta and kapha. Then due to itching,
blisters and discharges are quickly produced and all the ulcers become one and this serious disease is called *ahipūtana*.

59, 60. *Vṛṣaṇakacchū* (Scrotal dermatitis)

\begin{align*}
\text{स्तनांक्र्तसादनहीनस्य मलो बृषणसंधितः।} \\
\text{यदा प्रकिल्लिते स्वेदात् कण्डू संजनयेत्तदा ॥५९॥} \\
\text{तत्र कण्डूयनात् क्षित्रः स्फोटः स्वाधच्छ जायते।} \\
\text{प्राहूवृषणकच्छू तां श्लेष्मरक्तप्रभोपजामु ॥६०॥}
\end{align*}

When, in absence of baths andointments, faeces accumulate in the scrotal region and when that becomes sodden due to sweat, itching is produced. Then due to that itching, blisters and a discharge are quickly produced. This is called *vṛṣaṇakacchū* and is due to aggravation of *kapha* and *rakta*.

61. Guda-bhranśa (Prolapse Rectum)

\begin{align*}
\text{प्रवाहणातिसारायां निर्गच्छति गुदं बहिः।} \\
\text{रूख्शदुर्बलवेष्ट्य तं गुदत्तनश्चक्षेत्रोगोत्सोवो। ॥६१॥}
\end{align*}

Due to straining and diarrhoea the rectum comes out in the dehydrated and emaciated person; that is called prolapse rectum.

\begin{align*}
\text{इति सृष्टिसंहितायां निवासस्थाने क्षुद्ररोगनिदानं} \\
\text{नाम अयोद्वोद्धव्यः। ॥६२॥}
\end{align*}

Thus ends the thirteenth chapter entitled "Diagnosis of Minor Diseases" of *Nidāna-Sthāna* of *Suśruta-Saṃhitā*. 
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study on the reasons for putting acute and fatal diseases and very minor diseases together would be interesting and may give an insight into the approach of the ancients.

2. A study for the identification of the clinical entities described here would be useful in many ways.

3. *Doṣika* etiology may be investigated to explain the various idiopathic skin diseases.
CHAPTER FOURTEEN
NIDĀNA-STHĀNA
Eighteen types of infective and traumatic lesions of the penis produced by the local applications of watermoss (śūka) to elongate it have been described along with their ṭoṣika etiology and clinical features. Description of these lesions produced by the unhygeinic and improper medications possibly included ulcerative and neoplastic lesions.
Chapter Fourteen

1. अथातः शूकदोषनिमित्तां व्याघ्रस्थायामः।।1।।

Now we would expound upon “The Diagnosis of Śūka-doṣa”

2. यथोवाच भगवान् धन्वन्तरिः।।2।।

As was described by Lord Dhanvantari.

3. Enumeration of Eighteen Śūka Diseases

लिङ्गवृद्धिमिच्छतामण्डक्रमवृत्तानां शूकदोषनिमित्ता वशं
चाटो च व्याघ्रो जायते।। तद्भवा—सर्पिक, अस्थिलिक, ग्राहितं,
कुम्भिक, अलज, मृदितं, समूद्रिक, अवमन्थं, पुष्करिक, स्पर्शाहानि,
उत्तम, शतपोनकः, त्वक्पाकः शोणितार्बुं, मांसार्बुं, मांसपाकः,
विद्रिधि, तिल्काकलक्षचितं।।3।।

In those desirous of getting their penis enlarged and in those engaged in irregular procedures, eighteen diseases are produced due to śūka-doṣa. They are as follows:

1. Sarṣāpikā, 2. Aṣṭhilikā,
3. Grathita, 4. Kumbhikā,
5. Alajī, 6. Mṛdītā,
7. Sammūḍhāpīḍakā, 8. Avamantha,

1. Wrong use of recipes for enlarging the penis, the śūka (recipes) being watermoss with organisms (Dalhana).
9. Puṣkarikā, 10. Sparśahāni,
11. Uttaṁā, 12. Sataponaka,
13. Tvakpāka, 14. Śoṇitārbuda,
15. Māṁsārbuda, 16. Māṁsapākā,

4. Sarṣapikā

The boils which are like white mustard and which are
due to (vitiated) kapha and rakta as a result of improper use
of the recipes for elongating the penis are known as sarṣapikā
by the wise.

5. Aṣṭhilikā

The boils which are hard with irregular edges and are due
to vitiation of the vāta as a result of the use of recipes for
enlarging the genitals, along with poisonous materials are
called aṣṭhilikā.

6. Grathita and Kumbhīkā

Grathita is that which is produced due to constant use of
śūka and arises due to vitiated kapha.

Kumbhīkā arises due to vitiation of rakta and pitta, is like
the seed of jambu, and is black.

7. Alajī and Mrdita

Alajī and Mrdita
Alajī has already been discussed along with its features. Mrdīta is that which due to compression, is associated with inflammation, and is due to vitiation of vāta.

8/1. Sammūḍha

पाणिन्यां भूवासंमृदे संमृद्विडका भवेत्।

Sammūḍha-πिदακā is produced by rubbing the penis with both hands.

8/2, 9/1. Avamantha

दीर्घां बहुवचस्च पिडका दोर्धन्ते मध्यस्ततु या:॥८॥
सोडवमन्यत्: कफासुरग्न्यां बेदनारोमहवर्म्युक्तः।

Those πिदακās which are large, numerous and cracked in the centre are avamanthas; they are due to vitiated kapha and blood and produce pain and horripilation.

9/2, 10. Puṣkarikā & Sparśaṭāni

पित्तशोणितसुभूता पिडका πिडकाभिचिता॥९॥
पप्पुष्ककसंस्तृताः ज्ञेया πुष्ककरिकेति सा।
जनयेत् स्योरश्रानि तु σοरατिष्ठ शूक्ष्मसितम्॥१०॥

That πिदακā which is due to vitiation of pitta and σονίτα, which is surrounded by many smaller πिदακās, and which is like a lotus seed is known as puṣkarikā.

Sparśaṭāni (loss of sensation) is produced by vitiated σονίτα due to śūka.

11. Uttamā

मुद्गमायोयमा रक्ता πिडका रक्तपित्तजा।
उत्तमेया तु विज्ञ्या शूकाजीर्णिनिमित्तजा॥११॥

1. S.S.II.6.18/2.
The *pīḍakās* which are like *mudga* and *māṣa* are red, and are due to vitiated *rakta* and *pitta*, should be known as *uttamā*. They are due to repeated use of *śūka* for a long time.

12. Šataponaka

चित्ररुणमुखवृंदु चित्र यथा समनत्तः।
वातशोणितजो व्याधिवच्छेयः शतपोनकः॥१२॥

That disease in which there are multiple tiny openings around the penis and which is due to vitiation of *vāta* and *śoṇita*, is known as *šataponaka*.

13/1. Tvakpāka

पित्तरक्तक्षत्रो शेयस्तवपाको ज्वरवाहिवान्।

That should be known as *tvakpāka* which is due to vitiated *pitta* and *rakta*, and which produces fever and burning sensation.

13/2, 13/3. Šoṇitārbuda

क्रुणे: स्फोटे: सरक्तीच्च पिडकामिद्धच पीडितम्।
यस्य वास्तुरुज्वतोप्रणा शेयेऽत्चछोणितार्ब्बम्॥१३॥

Those *pīḍakās* which are associated with black and red blisters, and in which there is severe pain in the penis should be known as *śoṇitārbuda*.

14/1. Māṁsārbuda

मांसदोषेन जानियादबुंदं मांससंब्बन्धम्।

*Māṁsārbuda* should be known as being produced due to the vitiation of *māṁsa*.

14/2, 15/1. Māṁsapāka

शीर्षते यस्य मांसाति यज्ञ सर्वैव च बेदना:॥१४॥
विद्यालं मांसपाकं तु सर्वदोषकृतं भिज्ज।
Diagnosis of Disorders due to Śūka-Doṣa

That in which muscles putrefy and there is pain of all types is known as māṁsapāka by the clinician; this is due to vitiation of all the doṣas.

15/2. Vidradhi

Vidradhi is due to a combination of all the doṣas together, and has already been described.

16, 17. Tilakālaka

Tilakālaka is that condition which is due to vitiation of all the doṣas where black and mottled or poisonous śūkas being used putrefy the whole penis very quickly and the muscles become black and necrosed.

18. Incurable Types

Out of all these māṁsārbuda, māṁsapāka, vidradhi and tilakālaka are incurable.

Thus ends the fourteenth chapter entitled “Diagnosis of Disorders due to Śūka-doṣa” of Nidāna-Sthāna of Suśruta-Saṁhitā.

Suggested Research Problems

1. A whole chapter devoted to the lesions caused by local applications to increase the size of the penis indicates its prevalent practice. A historical and comparative study on this practice in other civilizations may be interesting.

2. Clinical features of cancer penis can be identified in some lesions (4-18) described. Associations of cancer and application of irritants is significant and should be further looked into.

3. A study to correlate the conditions described here (4-18) with modern clinical terminology may be undertaken.

4. An experimental study to evaluate the properties of local applications of watermoss especially in increasing the size of tissues may be useful; a harmless preparation could later be developed and judged in cases of non-endocrinal hypogenitalism etc.
निदान-स्थानम्
पञ्चवधोऽध्यायः

भगव-निदानम्
Diagnosis of Fractures and Dislocations

CHAPTER FIFTEEN
NIDĀNA-STHĀNA
SUMMARY

Various etiological and clinical features of fractures and dislocations have been dealt with in this chapter. Trauma, accidental or otherwise, has been mentioned as the cause of all bony injuries (3).

Six types of dislocations and twelve types of fractures have been described (4).

Loss of function of the joints and tenderness have been described as the general clinical features of dislocations (6). Description of the different types of dislocations includes displacements in all directions and also some fracture-dislocations (5, 7).

Fractures have been classified into twelve types. The description includes almost all types of bony injuries including greenstick and fissured fractures and subperiosteal hematomas (8).

Crepitus, tenderness, and loss of function have been mentioned as general features of fractures (9).

Individual fractures were diagnosed on the type of injury and the deformity caused (10).

Comminuted, impacted and compound fractures have been considered difficult to treat. Very old or young and malnourished persons have been mentioned as bad risk patients (11).

Further, fractures involving head and neck, pelvis and chest were thought to be incurable (12, 13).
Pathological fractures occuring in congenitally diseased bones have also been mentioned as incurable (14).

The fractures have been said to heal better in young adults (15).

The different types of bones have been mentioned to sustain different types of fractures (16).
Chapter Fifteen

1. अथातो भगवानं निवानं व्यायामयमः ॥ ११॥

Hereafter we would expound upon "The Diagnosis of Fractures and Dislocations".

2. यथोवाच भगवान् धनवत्तरि: ॥ २॥

As was described by Lord Dhanvantari.

3. विध्वंसम्यां भजनुपविशालिता ॥ ३॥

Etiology

Fall, compression, blows, throwing and specific traumas from teeth etc. of ferocious or docile animals are mentioned to cause various types of bony injuries.

4. विध्वंस: (स्त्रि) जालमनकोविषमनुसयमान द्विविभेदावपपत्ते सन्धिमुखतं काण्डमध्यं । तत्र यथविधं सन्धिमुक्तं द्वादशविधं काण्डमध्यं भवति ॥ ४॥

Classification

Now, bony injuries produced by various means are conventionally classified into two groups only—dislocation of joints and breaking of bones (fractures). The dislocations are of six types and the fractures are of twelve types.
5. Types of Dislocations

The six types of dislocations are:

2. *Viśliṣṭa* —Subluxation.
5. *Atiṣipta* —Dislocation with overriding.

6. General Clinical Features of Dislocations

Inability of extension (and abduction), flexion (and abduction), circumduction or any movement, severe pain and hyperaesthesia, are the general clinical features of dislocations.

7. Specific Features of Dislocations

Specifically in the *uṭpiṣṭa* variety, swelling on both sides of the joint and pain occur; various types of pain specially occur in the nights.
In *viśliṣṭa* type, slight swelling, persistent pain and derangement of the joint occurs.

And, in the *vivaritita* type of dislocation deformity and pain occur due to lateral displacement of the joint. In *avakṣipta* type of dislocation separation of the joint and severe pain occur. In *atikṣipta* type of dislocation there is pain and overriding of both bones of the joint. In *tiryakṣipta* type of dislocation one of the bones gets obliquely displaced and excessive pain occurs.

8. **Types of Fractures**

   काण्डभग्नसतः ऊँचव वज्याम्—कर्कटकम्, अदवकर्ण, चूँविते, पिथ्वितसम्, अस्तिप्चछलितं, काण्डभग्नं, महजातुभतम्, अन्तिकाति, वक्रं, छिल्लं, पाटितं, स्फुरितमिति द्वारकविघम्।।८।।

   Now we would describe the fractures which are of twelve types:

1. **Karkata**ka
   —Fracture with hematoma.
2. **Asvakarna**
   —Oblique fracture.
3. **Curnita**
   —Comminuted fracture.
4. **Piccita**
   —Compression fracture.
5. **Asthisclalli**ta
   —Subperiosteal hematoma.
6. **Kandabhagna**
   —Transverse fracture.
7. **Majjanugata**
   —Impacted fracture.
8. **Atipatita**
   —Complete fracture.
9. **Vakra**
   —Greenstick fracture.
10. **Chinna**
    —Incomplete fracture.
11. **Pati**ta
    —Cracked fracture.
12. **Sphujita**
    —Fissured fracture.

9. **General Features of Fractures**

   *द्वयमीलहलं सन्दन्तवर्तनस्पद्यावस्रहांस्तित्वुपवस्वपिद्यामाने शर्वः सताझुता विविधवालनाधिकारवः सर्वस्वर्वस्थासु न शार्मलाभ इति समासेति काण्डभग्नलक्षणसुकृतम्।।९।।*
Marked swelling, inability to bear movements or rotation and touch, crepitus on squeezing, looseness of the parts, appearance of various types of pain and no relief of pain in any posture, are briefly the general clinical features of fractures.

10. Specific Features of Fractures.

Specifically in karkataka types there is loss of function on both sides of the fracture and in the centre it is raised like a gland (fracture hematoma).

In asvakarnaka the fracture is raised like the ears of a horse.

In curnita type of fracture there is sound on palpation.1

In piccita type of fracture there is flattening and marked swelling.

In asthicc halita type of fracture the bones are slightly elevated on the sides.

In kandabhagna the fracture moves on shaking.

In majjānugata type of fracture, the bony spicules get impacted into the middle of the bone and let out the bonemarrow.

In atipātita type of fracture, the bone is completely broken.

In vakra type of fracture the bones get bent, but not broken.

In chinna type of fracture the other side remains unbroken.

In pājita type of fracture many small cracks occur along with pain.

1. Crepitus.
In *sphuṭita* the fracture is swollen as if full of bristles and has multiple cracks.

11—13. **Prognosis**

In *sphuṭita* the fracture is swollen as if full of bristles and has multiple cracks.

11—13. **Prognosis**

Out of them *cūrṇita*, *chinna*, *atipātita* and *maggānugata* (types of fractures) are curable with difficulty, as are also those in the weak, the old and the children and in those suffering from consumption, emaciation, leprosy (and other skin diseases) and asthma and in those in whom the joint is also involved.

These verses have been quoted in this context.

Fractures of the skull and waist as well as their dislocations and subluxation, as also, the crushing of the hip bones should be discarded from treatment by the physician.

Separation of skull sutures, *cūrṇī:sa* fractures of the forehead, and fractures in the intermammary region, temples, back and vertex should be discarded (from treatment).

14,15/1. **Pathological Fractures**

The bones and joints which were abnormal even prior to injury or were so since birth¹, or those fractures which even

1. *Pathological fractures.*
though reduced properly, have become complicated due to improper immobilisation and bandaging or due to movements should be discarded from treatment.

15/2, 16/1. Healing of Fractures at Different Ages

मध्यस्य चलास्वस्थास्तिस्तिस्य याः परिकीर्तिताः ॥१५॥
तत्र तिथिः भवेज्जन्तुपप्पत्तातो विगायताः।

If treated by the expert clinician the fractures become stable after proper treatment in the middle one of three age groups as described (elsewhere).

16/2-17. Types of Fractures in Different Bones

तत्स्यास्तिस्तिस्य नम्यन्ते भव्यन्ते नल्कानि तु ॥१६॥
कपालानि विनिष्कर्ते स्फुटित मुच्यिन मच्चानि च ॥१७॥

The cartilaginous bones bend, the tubular bones break, the flat bones get fissured and the small bones get cracked.

इति सुभूतसंहितायां निदानस्थाये भगवननिवान्
नाम पञ्चवद्वस्थेद्ध्ययः ॥१८॥

Thus ends the fifteenth chapter entitled “Diagnosis of Fractures and Dislocations” of the Nidāna-Sthāna of Suśruta-Samhitā.

1. S.S.I.35.29.
SUGGESTED RESEARCH PROBLEMS

1. A historical and comparative study on the early records of the division of bony injuries into dislocations and fractures and their further classifications should be carried out.

2. A study on the diagnostic features described for various types of fractures and dislocations should be conducted to establish their clinical identity (7, 10).

3. Mention of pathological fractures is significant. A study on the recorded mention of pathological fractures in other systems of medicine would be interesting (14).

4. Similarly a study on early mention of differential healing time in different age groups and different types of fractures occurring in different types of bones could be carried out (15, 16).

5. There has been no mention of doṣas in this chapter either in the etiology or symptomatology. It would be interesting to investigate into the reasons for this.
मुखरोग-निदानम्

Diagnosis of Oral Diseases

CHAPTER SIXTEEN

NIDĀNA-STHĀNA
Etiology and clinical features of sixty-five diseases occurring at seven sites in the oral cavity have been dealt with in this chapter (3).

Eight diseases of the lips have been described; the description includes the clinical features of chapped lips, herpes labialis, and neoplasms (4–12).

Fifteen types of gum diseases have been enumerated. They include pyorrhoea alveolaris (17) and other inflammatory lesions of the gums leading to loosening and exfoliation of the teeth (16–24/1), impacted tooth (25/2–26/1) and alveolar sinuses (26/2).

Eight dental diseases (27) including caries, collection of tartar and odontitis have been described (27–35). Dislocation of the jaw (35) has been included in dental diseases.

Three doṣika types, carcinoma tongue and ranula have been included in the five tongue diseases (36–39). Clinical features of nine diseases of the palate have been described (40–45); enlarged uvula, and tonsils have been included in the description.

Seventeen diseases of the throat include the description of diphtheria, pharyngeal abscess, peritonsillar abscesses and neoplastic lesions (46–63).

Four types of stomatitis (64–66) have been described.
Chapter Sixteen

1. अथातो मुखरोगाणः निवासं व्याख्यास्यामः ॥ १॥

Now we would expound upon “The Diagnosis of Oral Diseases”.

2. यथोवच भगवान् धन्वन्तरि: ॥ २॥

As was described by Lord Dhanvantari.

3. Classification of Oral Diseases

मुखरोगः पद्धचन्द्रठ्ठर्थवांनि सप्तस्वायतनेषु। तत्रायतनानि—ओघो, वन्तमूलानि, वन्ता; जिह्वा, तालु, कण्ठः; सर्वाणि चेति। तत्राष्टावो-ष्ठयोः; पद्धचन्द्र दन्तमूलेषु, अष्टो दन्तेषु, पद्धच जिह्वायां, नव तालु, सप्तदश कण्ठे, त्रयः सर्वाण्यायतनेषु ॥ ३॥

The diseases of oral cavity are sixty-five (in number) and they occur at seven sites. These sites are: the lips, gums, teeth, tongue, palate, throat, and the whole oral cavity. There are eight diseases of the lips, fifteen of the gums, eight of the teeth, five of the tongue, nine of the palate, seventeen of the throat and three affecting the whole oral cavity.

4. Aetiology of Lip Diseases

तत्रौष्ट्रस्वाक्षरावातपितंदलेखसन्त्प्रायतः सप्तस्वायतनेषु ॥ ४॥
The diseases of lips are due to *vita, pitta, kapha* separately and together, *śopita, mānsa, medas* and trauma.

5. The Clinical Features of Lip Diseases (5—12)

**Diseases of Lips due to Vāta**

कर्सन्धी पश्चिम स्तवथो क्षणों तीव्रकर्मिन्चितो।
दाल्ये ते परिपाटके हुचाण्डे मार्गकापतः।॥५॥

The lips afflicted by *vāta* are rough, hard, rigid, black, acutely painful and have cracks and fissures.

**Diseases of Lips due to Pitta**

आरत्तो पिडकाभिस्तु स्वर्णाक्षविषिभ्यम् शाम्।
सत्ताह्याकसंस्तनाबो नीलो पीतों च पित्ततः।॥६॥

The lips afflicted by *pitta* are full of mustard like furuncles leading quickly to burning, suppuration and discharge and they appear blue or yellow.

**Diseases of Lips due to Kapha**

सवर्णाभिस्तु चोपते पिडकाभिरवेदनो।
कण्ठसमतो काफाच्छूती विलोक्ती शीलतो गृहः॥७॥

The lips afflicted by (vitiated) *kapha* are painless and are associated with vesicles having the same colour (as that of lips), have itching and oedema, and are slimy, cold and heavy.

8. **Diseases of Lips due to the Three Doṣas (Vāta, Pitta and Kapha) together**

सक्तं क्षणो सक्तं पीतो सक्तच्छेते तथेष् च।
सत्तिवातेन विन्यावनेकपिडकाचितो।॥८॥

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1. It seems to be a viral infection in which crustation is accompanied with the features described here.
2. It could have been herpes zoster or furunculosis.
3. ? Allergic manifestation as after insect bite.
4. ? Herpes labialis.
The lips afflicted by all the three doṣas together are known by their being sometimes black, sometimes yellow and sometimes white and by their having vesicles of many types.

9. **Diseases of Lips due to Šoṇita¹**

क्षूररफ्लवर्णांसि: पिडकासि: सामाचितोि।
रक्तापसृष्टी हविरं सवत्त: शोणितप्रभी।॥९॥

The lips afflicted by Šoṇita have a bloody discharge, shine like blood and are associated with vesicles of the colour of date fruit.

10. **Diseases of Lips due to vitiating Māmsa².**

मांसपुष्टी गुहुः अंत्यी मांसपिण्डवुष्टाती।
जन्तवश्रेष्ठ । मूच्चितिः सूक्कस्योभयतो मुखात्।॥१०॥

The lips afflicted by vitiated Māmsa are heavy, thick, and raised like muscular lumps and maggots appear at both the angles of the mouth.

11. **Diseases of Lips due to vitiated Medas³**

मेदसा घृतमण्डाभी कण्डूमत्तो स्थिरो मूहु।
अच्छञ्च स्फटिकस्या जामालावं सवत्तो गुहु।॥११॥

The lips afflicted by vitiated meda are like the clear upper layers of ghṛta, have itching, are fixed, soft, and heavy with a colourless crystal like discharge.

12. **Diseases of Lips due to Chronic Trauma**

क्षतजाभी विदीयेयं पाठपत्ते चासितात्।
प्रथितो च समाचितावृष्टी कण्डूसमिच्छितो।॥१२॥

1. ? *Erythema multiforme*.
2. ? *Malignant granuloma or chancre*.
3. ? *Leuoplakia*. 
The lips afflicted by trauma are bloody red in colour, have cracks and fissures, have knotty swellings and are associated with itching.


The diseases of the gums are—Śītāda, dantapuppuṭaka, dantaveśṭaka, śauṣira, mahāśauṣira, paridara, upakūḍa, dantavaidarbha, vardhana, adhimāṭsa, and the five types of sinuses.

14, 15. Śītāda (Spongy gums)

That disease in which there is sudden bleeding from the gums, in which foul smelling, black, soft and sodden gums get necrosed and start receding is called śītāda. It is produced by kapha and sōṇita.

16. Dantapuppuṭaka (Periodontitis)

That disease, in which there is a painful, big inflammatory swelling in two or three teeth together should be known as dantapuppuṭaka and is due to kapha and rakta.

1. Even with gentle touch.
17. Dantaveṣṭā (Pyorrhoea)

That disease in which pus and blood are discharged and teeth become loose, should be known as dantaveṣṭā and is produced by vitiated sōṇīta.

18. Śauṣīra (Apical Abscess, Root Abscess)

That disease in which there is swelling at the roots of teeth, which is painful, has excessive salivation and has itching should be known as śauṣīra and is due to kapha and rakta.

19, 20/1. Mahāśauṣīra (Palatal Abscess)

That disease in which the teeth become loose from their sockets, there is tearing of the palate, suppuration of gums, and pain in the mouth is called mahāśauṣīra and is due to vitiation of all the three doṣas together.

20/2, 21/1. Paridara (Bleeding Gums)

That disease in which the gums decay and blood comes on spitting, is known as paridara and is due to pitta, blood and kapha.
21/2–23/1. Upakuṣa (Suppurative Gingivitis)

That disease, in which there is burning sensation and inflammation in the gums, the teeth become loose, there is bleeding with mild pain on moving them and swelling occurs after discharge of blood and there is foetid odour in the mouth, is known as upakuṣa and is due to pitta and rakta.

23/3, 24/1. Danta-vaiderbha (Traumatic Periodontitis)

That disease, in which severe oedema is produced upon rubbing the roots of teeth, and the teeth become loose, is called vaiderbha and is due to trauma.

24/2, 25/1. Vardhana (Supernumerary Teeth)

That disease, in which the supernumerary tooth is produced by vāta and is severely painful, is known as vardhana and the pain subsides upon eruption.

25/2, 26/1. Adhimāṁsa (Impacted Tooth)

That disease, in which there is severe inflammation, intense pain in the jaw behind the last tooth, and salivation is known as adhimāṁsa and is due to kapha.
26/2. Alveolar Sinuses

As described (earlier) five types of sinuses are known to occur in the roots of teeth.

27. Diseases of the Teeth (27–35)

Diseases of the teeth are: dālana, kr̥midanta, dantaharṣa, bhañjanaka, dantaśarkara, kapālikā, śyāvadantaka and hanumokṣa.

28. Dālana (Odontalgia)

That disease in which many teeth get cracked and in which severe pain is produced, is known as dālana and is known to be due to vāta.

29. Kr̥midanta (Caries)

That disease in which the teeth have black colour, have cavities and become loose, have a discharge, swelling and bouts of severe pain without any apparent cause, should be known as kr̥midanta and is due to vāta.

30. Dantaharṣa (Hyperaesthesias of the Teeth)

That disease in which the teeth are unable to bear the touch of cold or hot, is known as dantaharṣa and is due to vāta.
31. Bhañjanaka (Fracture Teeth)

That disease in which the mouth becomes distorted and there is fracture of teeth along with severe pain is called bhañjanaka and is due to kapha and vāta.

32. Dantaśarkarā (Tartar)

That disease in which tartar gets deposited on the teeth like gravel, and which destroys the qualities of the teeth should be known as dantaśarkarā.

33. Kapālikā (Non-vital Teeth)

That disease, in which enamel of the teeth along with gravel gets cracked, is known as kapālikā and this destroys the teeth.

34. Śyāvadantaka (Discoloured Teeth)

That disease, in which the teeth gets charred due to mixed action of śonita and pitta and which become blackish or blue is known as śyāvadantaka.

35. Hanumokṣa (Dislocation of Jaw)

That disease which is due to ṛṣeyo vṛtyārābhitattvam is known as Hanumokṣa.
That disease in which the mandibular joint becomes dislocated due to vāta aggravated by its various causes is known as hanumokṣa and has the features of ardita disease\(^1\).

36. Diseases of the Tongue (36–39)

जिष्ठागतास्तु——कण्ठकास्त्रिविवालस्त्रिभिर्विर्भिदौः, अलास, उपजिष्ठिका चेति।॥३६॥

Diseases of the tongue are: the three types of kaṇṭakas caused by the three doṣas, alāsa, and upajīhvikā.

37. The Three Kaṇṭakas (Glossitis)

जिष्ठापृष्ठिन्त्वे स्फुकिता प्रस्थुता भवेच्छ शाक्पणद्वप्रकाश।
पितेन पीता परिधृतं च चित्ता सरसङ्गरपि कण्ठकेयच।
कफेन गुर्गी बहुला चित्ता च मांसोद्गममः शाल्मलिकण्ठकामः।॥३७॥

The tongue vitiated by vāta becomes furred, loss of sensation occurs and it is rough like the leaf of śāka tree\(^2\). The tongue vitiated by pitta becomes yellow, has burning sensation and is full of bloody thorns\(^3\). The tongue vitiated by kapha becomes heavy, thick and is full of muscular papillae like thorns of śālmali\(^4\).

38. Alāsa

जिष्ठालचे य: श्वयः प्रमाग: सोक्लाससंजः कफरक्तमूति:।
जिष्ठां स तु स्तम्भयति प्रवृद्धो मूले तु जिष्ठा वा भृषमेति पाकम्।॥३८॥

That disease which causes an indurated swelling\(^5\) on the

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1. Facial paralysis.
2. Furred tongue.
3. Acute glossitis.
4. Chronic hypertrophic glossitis.
5. ? Carcinoma tongue.
undersurface of the tongue is called alāsa and is due to (vitiayed) kapha and rakta. When fully developed it fixes the tongue and causes severe inflammation at the root of the tongue.

39. **Upajihvikā**

उपजिहविकाः श्वययुक्तं जिज्ञामुखन्यं जातं कफरक्षत्वयोनिः।
प्रसेरकण्डूपिराह्युक्ता प्रक्ष्यतेसाल्पपिजिलकरति।

That disease, in which the swelling is shaped like the tip of the tongue, which by being underneath it raises the tongue, and is associated with salivation, itching and burning sensation, is called upajihvikā and this is caused by (vitiayed) kapha and rakta.

40. **Diseases of the Palate (40–45)**

तालुकंतालस्तु—गलदण्डिका, तुंडिकेरी, अध्रुवं, कच्चपं, अबुंबं,
मांसस्यहुंतं, तालुकुप्पुं, तालुयोषं, तालुपुकं इति।

Diseases of the palate are: galaśūṇḍikā, tuṇḍikeri, adhruṣa, kacchapa, arbuda, māṁsasanghata, tālupuppuṭa, tāluṣoṣa and tālupāka.

41. **Galaśūṇḍikā (Uvulitis)**

क्लेष्मासुष्णं पर्यन्त तालोन्नलासः प्रवीढः दीर्घं: शोषो धातवसंस्कारः।
तूण्डाकासंवासंघं संप्रविष्टो व्याधिवंदः: कण्ठश्चूण्डोतिनाम्न।

That disease, which is caused by (vitiayed) kapha and rakta, which spreads from the base of the palate, produces an

1. Sublingual swelling such as ranula, dermoid etc.
2. Literally gala means throat and suṇḍi trunk of the elephant: galaśūṇḍikā or kaṇṭhaśūṇḍi therefore means a swelling hanging down in the throat like the trunk of an elephant.
oblong swelling, and looks like a distended bladder, and is further complicated by thirst, cough and dyspnoea, is named *kaṇṭhasūngī* by the clinicians.

42/1.  
Τυνδικερή (*Quinsy*)

*शोषः स्थूलस्तोवाहारपकी प्रायुक्ताव्यां तुण्डिकेरी मता तु।*

That disease in which there is oedema, increase in size (of the palate), pricking pain, burning sensation and suppuration is called *tundikeri* and is due to the above mentioned two (*kapha* and *rakta*).

42/2.  
Adhrusā (*Acute Inflammation of the Soft Palate*)

*शोषः स्तव्यो लोहितस्तालुवेशः रक्ताज्ज्ञेयः: सोडः सुषो रक्तवराचः।४२॥*

That disease, in which there is oedema, fixity and redness in the region of the palate alongwith pain and fever, is called *adhrusā* and is due to *rakta*.

43/1.  
Kacchapa¹ (*Torus Palatinus*)

*कूर्मोत्सन्नोदनोहोहोज्जातनारकतो शेषः कच्छपः श्लेष्मणा स्वातः।*

That (swelling) which is raised like a tortoise, is painless, takes a longtime to arise and is not reddish is called *kacchapa*; it is due to (vitiated) *kapha*.

43/2.  
Arbuda (*Tumour of the Palate*)

*पञ्चाकां ताल्मध्ये तु शोषः विश्वाद्वाहारपुं छोटतल्लक्ष्मम्।४३॥*

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¹ *Torus Palatinus*: A variety of *osteoma* palate in which overgrowth occurs in the midline of the hard palate, consisting histologically of laminated deposition of cancellous bone, is dry, hard, the shape and size varying from a flat and small elevation to a large nodular growth (*Stones*, 1954).
That swelling which is of the shape of a lotus, is in the middle of the palate, and has aforesaid features\(^1\) of raktārbuda is called arbuda.

44. Māṁsasanghāta

That disease in which muscles inside the palate get vitiated and which is painless, is called māṁsasanghāta and is due to (vitiating) kapha.

45/1. Tālupuppuṭa\(^2\)

That swelling in the region of the palate which is painless, fixed, is of the size of a plum is tālupuppuṭa and is due the kapha along with meda.

45/2. Tāluśoṣa

That disease in which there is excessive dryness, cracks in the palate and dyspnoea is called tāluśoṣa and is due to (vitiating) vāta along with pitta.\(^3\)

45/3. Tālupāka (Palatal Abscess)

Pitta causes excessively severe suppuration in the palate, and this is called tālupāka.

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1. S.S.II.11.15/2–17/1.
2. Palatal swellings like mixed salivary tumours or cysts etc.
3. Probably it alludes to local palatal manifestation of some systemic disease.
46. Diseases of Throat

Diseases of the throat are: Five types of rohini, kaśṭpāśālūka, adhijihva, valaya, balāsa, ekavṛnda, varṇa, śataghni, gilāyu, galavīḍaṛhi, galaughā, svaraghna, māṇsatāna, and vidāri.

47. Rohini (Diphtheria)

The fatal disease, in which the throat is afflicted by (vitiated) vāta, pitta and kapha separately or all together and also by śoṇita which vitiate the muscular tissue and produce buds which obstruct the throat, is called rohini.

48. Vātarohini.

That disease, in which the muscular buds are present around the tongue, which are extremely painful and which obstruct the throat is called rohini due to the action of vāta; this is accompanied with severe complications of vāta.

49. Pitta and Kapha Rohini

Kśīrogaṃ kśīroghaḥpaka tīrṇavāra pītānaṃritaḥ śvātu. Śrototānaṇḍaṇī, pravahapakṣa śvāt sa kafasāhva ে।।49।।
That rohini, in which (muscular buds) appear quickly and soon produce burning pain and suppuration and are accompanied with high fever is known to be due to pitta; that in which the channels get obstructed, which is mildly suppurring, heavy and localized is due to kapha.

50. Rohini due to Three Dosas and Blood

That rohini, which has deep seated suppuration, which is uncontrollable by all measures and which has the features of all the dosas, is due to all the three dosas together; that which is full of blisters, has features like those of pitta and is incurable, is due to vata.

51. Kanthaasaluka

That disease in which glandular swelling of the size of a plumseed occurs in the throat, has pain like that of a thorn or bristle, and which is rough, localized and curable by surgical measures only, is called kanthaasaluka and this is due to kapha.

52. Adhijihva

That disease in which swelling of the shape of the tip of the tongue occurs at the base of the tongue due to kapha

1. Swelling in the posterior part of dorsum of the tongue.
along with śonita should be known as adhijiḥvā. It should be discarded (from treatment) when it undergoes suppuration.

53. Valaya

वलास एवायतमुबलं छ शोषं करोत्याभिगति निवायि।
तं सर्वस्याप्रतिवर्तार्यं विर्भानीयं वल्लं वल्लति। ||५३||

That disease, which is due to kapha and which produces diffuse and raised swelling, which obstructs the passage of food and which is uncontrollable is called valaya and should be discarded (from treatment).

54. Balāsa

गले तु शोषं कुञ्जत: प्रवृत्ती शेषमानिति श्वासहोपपग्रहस्।
मर्मचिकं दुःस्तरमेतवाहुर्वालाससंसं निमुष्या विकारम्। ||५४||

That disease in which the vitiated kapha and vāta cause inflammation in the throat, and produce dyspnoea and pain, which also injures the vital spots and is treatable with great difficulty is called by the name of balāsa by the wise.

55. Ekavṛnda

वृत्तोभ्यते य: श्वास: सदाह: कण्ड्वन्निलोधश्वासहोपग्रहस्य नामः कङ्कङ्क: परिकृतिलोकसी व्याधिविलासक्षतजातसूतः। ||५५||

That disease, in which raised and circular inflammation alongwith burning sensation is produced, which is associated with itching, is non-suppurating, and is hard and heavy, is

1. Valaya literally means a bangle.
2. Balāsa literally means cough. The disease could have been some inflammatory lesion of the throat.
3. ? Chronic pharyngitis.
known by the name of ekavṛnda and is caused by kapha and śonīta.

56. Vṛinda¹

समुच्चतं वृत्तममन्नवाहं तीव्रजवरं वृन्दमुदाहरिति।
तं चापि पित्ताक्षरप्रकोपश्रविग्रहात् सतोवं पवनालजं तु।¹¹⁵॥¹¹

That disease, in which there is raised and circular swelling with severe burning sensation, and high fever is known as vṛnda, and that should be known to be caused due to vitiation of pitta and śonīta. If pricking pain is present it is due to vāta and śonīta.

57. Śataghni²

वर्तिधना कण्ठरथेण यथा चित्तप्रिमात्र विपशितपरोहै।
नानाश्चोच्छायकरी श्रवोषाज्ञेया शातालोक शाताल्यसाध्या।¹¹⁶॥¹¹

That disease in which a thick wick like swelling obstructs the throat, which is full of numerous muscular buds, which produces various types of pain, and is shaped like a śataghni (weapon) is called śataghni; this is due to all the three dosās together and is incurable.

58. Gilāyu³

ग्रिंगांश्च त्वामलकास्यमात्र:।
स्थिरोत्स्प्रकृत्यात् कफरक्तमूलतः।¹
संलक्ष्यते सक्तमिवाशानं च।
स शस्त्रसाध्यस्तु गिलायुसंज्ञा।¹¹⁵॥⁸॥¹¹

That glandular swelling in the throat, which is of the size

1. ? Acute pharyngitis.
2. Probably some malignant lesion in the throat.
3. ? Polyp.
of a seed of *āmlaka*, which is localised, has mild pain and is due to *kapha* and *rakta*, which feels like an obstructed bolus and is curable by surgery only, is called *gilāyu*.

59. **Galavidradhi**

शर्वो गलं व्याप्य समुल्लितो यः
शोफो रजो यत्र च सन्ति सर्वं:।
स सर्वदोषो गलविद्रविचित्तु
तस्मां तुल्यः खलु सर्वज्ञस्य॥५९॥

That disease, which produces inflammation after involving the whole of the throat and has pains of all the three types of *doṣas*, is called *galavidradhi*. It is due to all the *doṣas* together and has their combined features also.

60. **Galaugha**

शोफो महानन्दजलावरोधी तीर्थज्वरो वातगर्तोन्नता॥
कपेन जातो राधारत्नतेन गले गलौधः परिकौत्तेल्सौ॥६०॥

That disease, in which there is severe inflammation in the throat, obstruction to food and water, high fever and which obstructs the movements of wind, is called *galaugha* and is due to *kapha* and *ṣoṇita*.

61. **Svaraghna**

योडतिंत्रात्मयत् इवसिति प्रसक्तं भिन्नस्वर: शुष्क-विमुक्तकष्ठ:।
कफोपश्चविन्द्रायनेषु ज्यो: स रोगः इवतन्त्र स्वरभ:॥६१॥

That disease, in which (the patient) has constant dyspnoea, hoarseness of voice, dry and paralysed throat and in which

2. *Quinsy.*
3. *Acute laryngitis.*
kapha occupies the places normally occupied by vāta, is known as svarghna and is due to vāta.

62. 

Māmsatāna

प्रतानवान् य: श्वयः सुकण्ठो गलोपरों कुस्ते क्रमेन।
स मांसतान: कथितोश्वलम्बी प्राणप्रणुत् सर्वरूपो विकारः।

That disease, in which the painful, spreading inflammation produces obstruction in the throat gradually is called māmsatāna; it is pendulous, is fatal and is due to all the doṣas together.

63. 

Vidārī

सबाह्तोवं श्वयः सर्वदमन्तङ्गले पृतिविश्वाराणांसः।
पिलेन विचारावने विवारी पार्वं विशेषात् स तु देन गेते।

That inflammation, which is associated with burning and pricking sensation, alongside with redness and putrified sodden flesh in the throat, is known as vidārī disease of the oral cavity; it is due to (vitiating) pitta and occurs specially on the side in which the patient sleeps.

64–66. 

Sarvasara (Stomatitis)

सब्सरास्तु वातपितक्षोणितनिमित्ता।
स्थोत्रं: सतोवेयद्वसं समातायद्याचिंत सर्वसर्: स वाताल।
रक्ते: सब्सरास्तुमथं: सप्ततेह्रस्याचिंत चापि स पित्तकोपात्।
कण्ठुकूर्त्यादि: सब्रेण देशायाचिंत चापि स वै कफङ्।
रक्तेन पित्तितद्य एक एवं कस्सिचित्त् प्रविष्टो मुखायाकास्याः।

1. A malignant lesion, probably carcinoma.
2. Probably some form of malignancy with superadded secondary infection.
The sarvasara diseases are due to vāta, pitta, kapha and śoṣita.

**Vāta and Pitta Sarvasara:**

That sarvasara which has blisters, alongwith pricking pain all over the mouth, is due to (vitiated) vāta. And that sarvasara which is covered with reddish, slender and yellow (blisters) associated with burning sensation is due to (vitiated) pitta.

**Kaphaja Sarvasara and Mukhapāka:**

That sarvasara which is associated with itching and mildly painful blisters of the same colour as that of the mouth is due to (vitiated) kapha.

The sarvasara produced by (vitiated) śoṣita and pitta are one and the same; some call it mukhapāka.

इति सुभृत्तसंहितायां निदानस्थाने मुखरोगनिदानं नाम
भोडकोश्ययायः ॥ १६॥

Thus ends the sixteenth chapter entitled ‘Diagnosis of Diseases of Oral Cavity’ of Nidāna-sthāna of Suśruta-Saṁhitā.

इति भगवता श्रीधन्वन्तिरिणोपविभट्टायां तत्तत्त्वायेन
महर्षिणा सुभृत्तेन विरचितायां सुभृत्तसंहितायां
हितीयम् निदानस्थानम् ॥ १२॥

Thus ends second canto, Nidāna-Sthāna of Suśruta-Saṁhitā written by the great saint Suśruta, the disciple of and as preached by Lord Dhanvantari.
Suggested Research Problems

1. A comparative study could be done to establish the identity of the various diseases described in this chapter.

2. Hare-lip has not been mentioned in the diseases of the lips, although Vāgbhatta has mentioned it as khaṇḍośṭha. A historical study regarding the early mention of this condition in other systems of medicine may be interesting.

3. Among the clinical features of the five types of ‘rohīṇī’ specially the respiratory obstruction and its fatal course are the features of diphtheria. A study on the early mention of this disease would be worthwhile.

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Call No.  Sa6V/ Sin/ Sin  
Author— Singh, G. D.  

Title— Ancient Indian Surgery.  

"A book that is shut is but a block"