Annual Subscription : Inland : Rs. 125/- Foreign : 40 US $ Single Copy Rs. 15.00

ISSN 0377-0621

Journal of the National Integrated Medical Association

Second Largest Medical Journal in India

Vol. 55 - No. 5 May 2013 Estd. : 1959

Chief Editor
Dr. S. P. Kinjawadekar

Managing Editor
Dr. Ramesh J. Mehta

Associate Editors
Dr. J. Aprameya Raman
Dr. Rajan Joshi

Editorial Board
Chairman
Dr. K. Tripathi, U.P.
President, NIMA CC

Members
Dr. S. I. Nagral, Maharashtra
Dr. P. H. Kulkarni, Maharashtra
Dr. S. P. Dogra, Punjab
Dr. V. D. Tembhurnikar, Maharashtra
Dr. Mahesh Gupta, MP
Dr. V. D. Bhardwaj, UP
Dr. Hasmukh Vaidya, Gujarat
Dr. Mandar Ranade, Maharashtra
Dr. D.G. Kadam, M.S.
Dr. Tanuja Nesri, Maharashtra
Dr. Vishal Bhanot, Punjab
Dr. R. N. Pathak, UP

Local Consultative Committee
Chairman
Dr. S. S. Mavlankar

Members
Dr. L. G. Jadhav
Dr. S. H. Pandya
Dr. V. Borvancha
Dr. N. U. Revar
Dr. J. K. Rai
Dr. Vijay Mane

Media Executive
Dr. M. G. Jadhav, Maharashtra

Contents

Our e-mail ID : nimajournal@indiatimes.com

President's Message

We all know the fact that problems faced by our members are more for them, who are in private practice. Moreso in private practice, General practitioners are dominating the list. In fact GPs or family physicians are the back bone of medical and health services in rural as well as the poor urban population of country. This is our real power and best face we can highlight.

But as an observation we find that problems of legal harassment arise as we are caught in any negligence, sudden death of patient or complications during treatment in General practice. So apart from being very cautious and careful in practice we will have to always make efforts to improve our clinical knowledge, skill and experience. I can not forget one of our teacher's saying at our farewell from medical college that "Don't forget to purchase atleast one book every year in your practice life instead of having a new woolen suit every winter". The sour truth is here that government is behaving in such a step-motherly way to our institutions that we are somewhat not at par in comparison to institutions of modern medicine. Even Ayurvedic and Unani Medical colleges are being run without a hospital or with a hospital having negligible number of patients.The training and teaching being given in colleges of Modern medicine is extremely different from the same in colleges of ISM.

So hereby I am emphasizing on the need of regular study, training, attending workshops and updating ourselves by various means. Not only individually but we have a responsibility to upgrade our whole community through CMEs, group discussions, sharing clinical experiences, arranging clinical symposia, workshops and conferences regularly. You may be a member of a small branch but always meet on regular intervals to discuss your problems with your colleagues, seniors and members of nereby big branches.

Also to enhance the scope of GPs now so many new challenges have come up and we have to be prepared for such type of diseases. Diabetes, Hypertension, Cardiac diseases, Hepatobiliary and Renal disorders are now being faced by our practitioners and we have to develop skill and experience to manage these ailments and their complications. As these diseases are on rise we can not keep away from our capability. The Golden chance is also here to use our Ayurvedic and Unani regimens because use and scope of magic Antibiotics are lesser in these diseases.

So we have to make our calendar to enhance our knowledge and skill and celebrate various National & International medicosocial events like World Heart Day, Tuberculosis Day, Leprosy Day, Asthma Day, Filaria Day etc. This is responsibility of our office bearers to arrange such type of programs and develop a culture to make NIMA a platform of gaining knowledge which is useful for our profession.

Friends as a policy we propagate ourselves to be Primary Health Care service Provider. We claim that all the PHCs should be reserved for ISM doctors and we can do it. So if we do not develop ourselves to face challenges in Basic health care we may lose many opportunities. We demand from state and central governments to enhance budget of ISM colleges so that quality of teaching & training can be improved. But we have to do our efforts continuously to update and enhance knowledge and skill of our members.

— Dr K Tripathi
National President - NIMA-CC
Shiv 8/79-A-M,Jairam Nagar, Bye-Pass Road, Shivpur, Varanasi-221003
Mob:. 09453360760,07408422939 / Email:ktripathi.nima@gmail.com

Please note that our Journal being National it is printed in English & Hindi Only.

Perspectives of Bhagandar (Fistula in Ano)

Dr. Amarprakash P. Dwivedi

INTRODUCTION

Bhagandar is described under 'ASTHAMAHAGAD' i.e. disease difficult to treat.The clinical features of 'Bhagandar' described in Ayurvedic text resembles definitely with 'Fistula in Ano'. In fact, the most scientific description of Bhagandar i.e. fistula is given in "Sushrut Samhita ,a text book of Ancient Indian Surgery" written about 1000 B.C by Sushruta, the Father of Surgery.

The Definition, Etiology, Types, Pathogenesis as per Shatkriyakal (onset and progress), Prodromal features, Clinical features, Clinical interpretation by examination, stage wise management and even the complications of Bhagandar (Fistula) has been perfectly explained by the learned Acharyas.

In this article, I have tried to compile all the scattered description about Bhagandar available in various Ayurvedic texts and incorporated modern description too. Hope this article will enlighten the prospective of Bhagandar and will be useful to research scholars of Ayurved specially working in the field of fistula management.

MODERN DEFINITION

Fistula-in-Ano is an inflammatory tract, which has an external opening (secondary opening) in the peri-anal skin and an internal opening (primary opening) in the anal canal or rectum. This tract is lined by unhealthy granulation tissues and fibrous tissues.

DEFINITION (AS PER AYURVED)

ते तु भगगुदवस्तिरुप देशकारणाच्च भगन्दरा इत्युच्यन्ते |
अपक्व पिडकाः पक्वास्तु भगन्दराः|

सु. नि. ४ /२

A disease or condition causing severe referred pain to Bhag (Perineum), Gud (Anal) & Basti (Pelvis) is called Bhagandar. The manifestation begins with a boil (Abscess) around peri anal region and if it is not treated properly can burst & convert into discharging track and is named as- Bhagandar.

ETIOLOGY

Etiology in modern medical science is divided in two categories.

1. NON SPECIFIC

These are due to Crypto glandular infection, Sequel of Anorectal abscess or Previous Pyogenic Abscess.

2. SPECIFIC

These are the diseases or underlying pathologies which can result in fistulous condition like Tuberculosis, Anal fissure, Ulcerative colitis, Crohn's disease, Leukemia, Colloid Carcinoma, Foreign body intrusion, Pelvic inflammation, Trauma, Exposure to radiation, Lymphogranuloma venereum, Immuno- compromised state, Infectious dermatitis & other Rectal, Obstetrical or Gynecological operations.

PATHOGENESIS AS PER SUSHRUT

Sushrut has beautifully described the pathogenesis of Bhagandar. He quoted that when a person is indulged in un salutary lifestyle & food habits, Vat in his body get aggravated & localized in anal canal. Further, it vitiates the muscle & blood, giving rise to Pitika (Boil)& if this condition is not treated in time, this Pitika suppurate & burst resulting in a discharging track which is known as 'Bhagandar'.

PATHOGENESIS AS PER CHARAK SAMHITA:

क्रिमि क्रिच्छ्र सूक्ष्म क्षाण प्लवाय
प्रवाहणानि उत्कटाश्च पृष्ठे:|
गुदस्य पार्श्वे पिटिका भृशार्ति: पक्व
प्रभिन्ना तु भगन्दर: स्यात |

In Charak Chikitsa sthan, Chapter 12/96-97 i.e. Shwayathu chikitsa adhyay (Bhagandar chikitsa) Acharya Charak has mentioned following causes of Bhagandar:

1.Krimi Bhakshan 2.Trin / Asthi Kshanan 3.Pravahan 4.Utkataasan 5.Horse riding

Note : In this context Krimi Bhakshan can be correlated with any infection caused by

M.S., Ph.D. (Sch.) Asso. Prof & In charge, Dept. of Shalya Tantra, Dr. D.Y. Patil College of Ayurved, Nerul, Navi Mumbai
Mobile-09323097013,
Email: dr.dwivedi@amarayurved.com

micro organism or Crypto glandular infection. Trin- Asthi Kshanan can be considered as sought of Bhagandar due to Trauma, Pravahan is straining during act of defaecation as seen in Bacillary Dysentery etc. causing inflammatory changes in rectum and anal canal and Utkataasan is continuously sitting in Squatting posture causing ischemia and micro necrosis at pressure point. Similarly, cause like horse riding in present scenario can be correlated with over motor bike driving.

PATHOGENESIS (SAMPRAPTI)

Charak has described pathogenesis of Bhagandar in very practical way. As per Charak etiological factors like Krimi Bhakshan, Asthi Kshanan, Pravahan, Utkataasan & Horse riding vitiate the Doshas & Causes Boil at peri anal region which after Suppuration burst & turns to Bhagandar.

PATHOGENESIS AS PER VAGBHATA'S 'ASTANG HRIDAYAM'

In Astang Hridayam, Uttar Sthan, Vol.3 Chapter 28/25 i.e. Bhagandara Pratishedha Adhyay Acharya Vagbhata has mentioned following causes of Bhagandar:

1.Riding on Elephant/Horse for long period, 2.Sitting on Hard seats, 3. Squatting Posture, 4. Maturing of Sinful acts of previous Lives 5.Abusing ascetics

Note: Vagbhatta has added two very distinct causative factors here. The exact reason of inclusion of Maturing of sinful acts of previous lives & abusing ascetics is not understood but we can consider it as indulging in indecent activity by a non self possessed person (act against salutary activity (Sadvritta) causing vitiation of doshas.

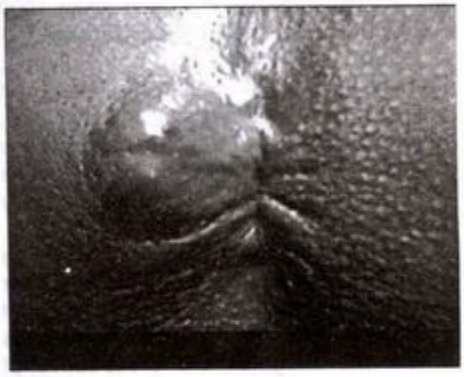
PATHOGENESIS AS PER VAGBHATA

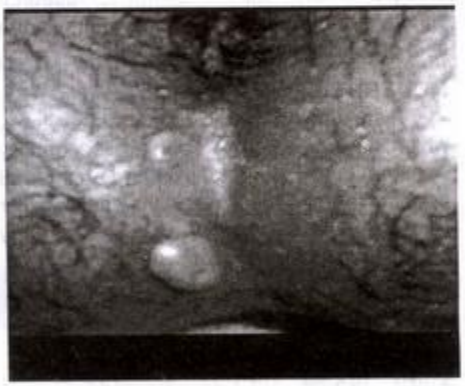
Pathogenesis starts with indulgence in above mentioned factors causing vitiation of blood & muscle tissues in the rectum which is followed by formation of ulcer (Vran), Preceded by pitika (Eruption/ Boil). This condition if not treated properly turns to discharging opening either to interior or exterior around peri anal region and named as Bhagandar.

CLINICAL FEATURES

Clinical presentation or sign and symptoms of fistula as per modern science are as follows:

1. The cardinal feature of Fistula is recurrent discharging boils with single or multiple external openings.
2. In chronic cases there are granulation tissues pouting out from the mouth of the fistula (external opening).
3. Internal opening can be felt as a nodule on anorectal wall by expertise.
4. Tenderness & painful defaecation can be noticed in inflammatory stage.
5. Induration of the skin & fever may be present due to suppuration.





CLINICAL FEATURES AS PER AYURVED

The Signs and Symptoms of Bhagandar are elaborated nicely in Ayurvedic text. Even the Prodromal features (Purv roop) has been described, so as to diagnose the condition at the earliest for better management. The Prodromal features mentioned are:

1. Pain at anal region after defaecation
2. Itching and swelling around peri anal region
3. Lower backache & pain at anal region after

long driving

4. Suppurative-induration (Abscess formation) at peri anal region associated with pain & burning sensation.

तेषान्तु पूर्वरूपाणि कटीकपालवेदना कण्डूर्दाहः शोफश्च गुदस्य भवति|

सु.नि.४/२

CLINICAL FEATURES

Bhagandar is manifested by severe referred pain to Bhag (Perineum), Gud (Anal) & Basti (Pelvis). The clinical features are described beautifully as per the stages i.e. progress of disease commonly known as Shatkriyakal. Also, the cardinal features are further explained as per the pre dominance of doshas.

Vataj type : Discharge associated with flatus, faeces & pricking pain.

Pittaj type : Very foul smelling with burning pain Kaphaj type : Sticky discharge with itching.

BHAGANDAR : SHAT KRIYA KAL

Sanchaya stage of accumulation mithyahara vihara or trauma. Accumulation of Dosha at normal sites.

Prakopa stage of provocation dosha further aggravates vata active and pitta & kapha passive unmarga gamita prasara stage of propagation vitiated dosha migrate their own place circulate throughout the body Sthana samshraya Stage of Localization Mamsa Rakta dusti Doshas lodged in Guda Katiruja, Kandu, Daha, Shopha Vyakti Stage of Manifestation- Bhagandara pidika - Aam / Pachyaman / Pakwavastha - Nadivrana

Bheda Stage of Complication - Communicated with different adjacent organs/ multiplicity of tracks-Discharge of flatus, faeces, urine & semen

CLASSIFICATION OF FISTULA-IN-ANO

There are many classifications available in modern text viz. Milligan Morgan & Goligher's classification, Ernst mile's classification, Melcheor Goz classification, Steltzner classification and Park's classification (as per relation with sphincters) however, Milligan Morgan & Goligher's classification is more practical.

In modern text Anal fistula is grossly classified in to low level & high level.

1. Low level fistula: Low level fistula open into the anal canal below the ano rectal ring. They are further subdivided into: a) Subcutaneous b) Submucosal c) Intersphincteric d) Suprasphincteric

2. High level fistula: High level fistula open into the anal canal at or above the ano- rectal ring. They are further sub divided into : a) Extrasphincteric or Supra levator b) Transsphincteric c) Pelvi- rectal fistula

CLASSIFICATION ACCORDING TO AYURVEDA

The classification criteria in Ayurvedic text is based on causative vitiated doshas, consistency of discharge, the smell, the number of openings and their course or anatomical appearance.

TYPES OF BHAGANDAR AS PER SUSHRUT

Sushrut Samhita, Nidan sthan, chapter 4, 'Bhagandar Nidan' Acharya Sushrut has mentioned five types of Bhagandar. Depending upon the resemblance in clinical presentation, we can correlate these Ayurvedic classifications with modern types of fistula in ano as follows:

1. Shatponak (Vataj) resembles with fistula having multiple openings.

2. Ushtagreev (Pittaj) resembles curved Fistula resembling the 'the neck of camel'

3. Parisraavi (Kaphaj) resembles fistula with big cavity & profuse discharge.

4. Shambukavart (Sannipataj) is fistula resembling with 'horse pedal' or horse shoe.

5. Unmargi (Kshataj) can be treated like fistula caused by trauma.

Further, Sushrut has advocated that Vataj, Pittaj & Kaphaj type of Bhagandar are Kashtsadhya where as Sannipataj & Aagantuj are Asadhya.

TYPES OF BHAGANDAR AS PER CHARAK

Acharya Charak has mentioned 5 types of Bhagandar. They are: 1. Vataj, 2.Pittaj, 3. Kaphaj, 4.Tridoshaj and 5.Kshataj

TYPES OF BHAGANDAR AS PER VAGBHATTA

Acharya Vagbhatta has mentioned 8 types of Bhagandar. They are:

1. Shatponak or Vataj, 2.Ushtagreev or Pittaj,

3.Parisravi or Kaphaj, 4. Parikshepi or Vat Pittaj, 5. Ruju or Vat Kaphaj, 6. Arsho Bhagandar or Kaph Pittaj, 7. Shambukavarta or Tridoshaj, 8. Unmargi or Kshataj

MANAGEMENT OF FISTULA

1. In unripen abscess condition i.e. when patients clinical feature do not reveal suppuration then, Oral Anti boitics, Anti inflammatory drugs are given. Similarly, Glycerine Mag.Sulf. dressing locally is advised.

2. In non burst abscess condition i.e. if boil is associated with induration and not resolved with palliative measures, then it should be treated like Vranshoth (abscess). Surgical incision & drainage is performed under aseptic precautions under suitable anesthesia, followed by regular dressing and medicines.

TREATMENT OF LOW LEVEL FISTULA

However, if the above treatment fails and fistula is formed then, following surgical treatment is practiced.

1. Fistulotomy - In fistulotomy, the corresponding track is laid open with the knife followed by scrapping of the unhealthy granulation tissues on the wall of the fistula.

2. Fistulectomy - In this, after the corresponding track is laid open with the knife , the whole track with the fibrous tissue is excised. The cavity is packed with roller gauze wrung with antiseptic solution. Unfortunately, recurrence rate with fistulectomy is between 3 and 9% as per type of fistula.

TREATMENT OF HIGH LEVEL FISTULA

1) Supra levator fistula

Supra levator fistula is mostly secondary to Crohn's disease or Ulcerative colitis or Carcinoma or foreign body.This requires treatment of primary condition & the fistula is ignored. Any attempt to open the fistula will cause incontinence.

2) Trans-sphincteric fistula with a perforating secondary track

For Trans-sphincteric fistula with a perforating secondary track the surgery done in two different methods are in practice.

Method - 1.

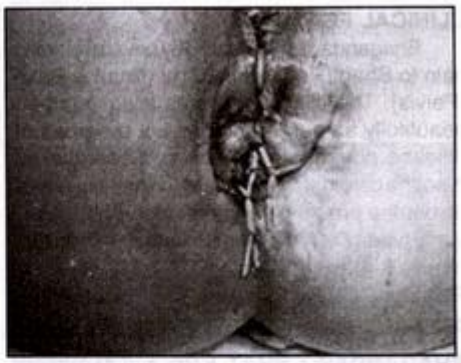
Fistulotomy of lower track with scapping of high fistula.

Method- 2

Gabriel's two stage operation -In this method, surgery is performed in two stages:

Stage 1 - Fistulotomy of lower track with seton ligation

Stage 2 - After 6 wks: Fistulectomy of remaining track with seton ligation.



TREATMENT ALTERNATIVES

- Anal Fistula Plug
- Fibrin Glue
- VAAFT (Video Assessed Anal Fistula Treatment)
- Ksharsutra (Ayurvedic Cutting Seton)

BHAGANDAR CHIKITSA: AS PER SUSHRUT

Acharya Sushrut has described treatment of Bhagandar in Sushrut Chikitsa sthan, Chapter 8/3-52. He has advocated that

- In unripen stage, one should follow 'Apatarpan to Virechan' measures of 'Vran chikitsa'.

- Once the Pitika achieves the ripening stage, Snehan, Avagah Swedan of the peri anal region should be practiced. Further, if the Pitika does not resolve then, भगन्दरम् मुखमालाद्वैषणीम् कृत्वा शस्त्रं पातयेत् |
- Exploration of the track (Fistulotomy) should be done with the help of fistula Probe. After, fistulotomy Kshar should be applied or Agnikarm (cauterization) should be done in the explored bed of ulcer.
- Post operatively, for pain management 'Yashtimadhu oil'/'Anu tail' irrigation (Sinchan) & Swedan (Seitz bath) is advised to the patient.

In the chronic and recurrent conditions, where the fistula track is partially fibrosis or the track is not patent, 'Bhagandar nasahan tail' can be irrigated through the fistula track to make the track patent & in those who are not willing to undergo surgery.

Further, in Chapter 17/29-33 'Visarp Nadi Stanrog chikitsa' Sushrut has described-

कृशदुर्बलभीरूणां नाडी मर्माश्रिता च या |
क्षारसूत्रेण तां छिन्द्यान्न तु शस्त्रेण बुद्धिमान् |
भगन्दरेऽप्येष विधिः कार्यो वैद्येन जानता |
सु.चि. १७ /२९- ३

Those patients who are not willing/ not fit for surgery, Nadi vran (sinus) can be treated with 'Ksharsutra' . Further, in this context Acharya Sushrut has quoted that Bhagandar can also be treated with the same 'Ksharsutra'.

BHAGANDAR CHIKITSA AS PER CHARAK

Interestingly, Acharya Charak has described treatment of Bhagandar in Chikitsa sthan, Chapter 12/ 97 i.e.Shwayathu chikitsa adhyay - Bhagandar chikitsa context.

विरेचनं वैषणपाटनं च विशुद्धमार्गस्य च तैलकाहः |
स्यात् क्षारसूत्रेण सुपाचितेन छिन्नस्य चास्य व्रणवत्क्रियेष्टा ||

Acharya Charak has quoted that if the Pidka does not subside by its own, Purgation should be given to the patient. Further, fistula track should be explored with the help of probe. Ulcer bed should be cleansed & cauterization is done with Hot Oil & then treated like vran.

However, in chronic cases, fistula track should be excised with 'Ksharsutra' ligation and wound management should be done.

CHAKRADATTA

In Chakradatta, the treatment of Bhagandar is mentioned in Chapter 46, Bhagandar Chikitsa.

The Kriya sutra described in Chakradatta is as follows:

1. Apakwa Stage:

गुदस्य श्वयथुं दृष्ट्वा विशोष्य शोधयेत्ततः|
रक्तावसेचनं कुर्याद् यथा पाकं न गच्छति ||

As soon as swelling of anal region is detected, it should be dried &cleansed (Shodhan karma). Patient should be kept on 'Apatarpan' i.e.light diet & purgated & blood letting is performed so that it does not suppurate. Medicated paste (Vat patradi lep) should be applied over the affected site.

2. Pakwa Stage:

एषणी पाटन क्षार छेदिन दाहकिर्म क्रमम |
विधाय व्रणवत कार्य यथादोषं यथाक्रमम ||

Once, the Pidka has achieved Pakwa stage, Exploration of the track (Fistulotomy) should be done with the help of fistula Probe. After, fistulotomy Kshar should be applied or Agnikarm (cauterization) should be done in the explored bed of ulcer.

In chakradatta, use of Rasanjanadi Lep and Kushthadi Pralep has been advocated in this context. Similarly, Snuhi dugdhadi Varti application is also mentioned along with internal use of Navkaarshik Guggulu and Saptavinshati Gugullu as a palliative regimen.

Further, in Nadi vran chikitsa : Chapter 45/ 11-14, where utility of Ksharsutra for exploration of track in sinus is advocated, again we see the indirect reference of use of Ksharsutra in the management of Bhagandar.

एषण्या गतिमन्विच्य गतिमन्विच्य
क्षारसूत्रानुसारिणीम |
भगन्दरे ह्यपिनेष विधिः कार्यो वैद्येन जानता ||

Note

The demonstration of Ksharsutra Nirman vidhi & method of Pratisarniya Kshar application is described in Chakradatta, Arsh Chikitsa: Chapter 5/ 148-151.

Here, while Ksharsutra preparation only Haridra churna & Snuhi Kshir is mentioned. There is no instruction of use of Kshar is metioned in any of the classical text.

भावितं रजनीचूर्णैः स्नुहीक्षीरे पुनः पुनः |
खन्यमानं सुदृढं सम्यं भिनत्त्यर्शो भगन्दरम् ||

BHAGANDAR CHIKITSA: VAGBHATTA

Vagbhatta has described manage-ment of Bhagandar as per the satge:

1. In the Pitika Stage

Effective treatment including Panchkarma like Vaman, Virechan & Raktamokshan can be done so as to Suppress induration (preventing Ripening/ Suppuration)

2. In Ripen stage

सम्यक शस्त्रेण पाटयेत |

Where as in Pakwa Awastha, Incision & drainage of Pakwa vranashoth, followed by application of Kshar or Agnikarma in the bed of explored track is mentioned.

3. Special Treatment Reference about 'Parikshepi' type of Bhagandar

परिक्षेपिणि चाप्येव ना ऽदुष्यतै:क्षारसूत्रकै:||

In 'Parikshepi' type of Bhagandar, Vagbhatta has advocated exploration by 'Ksharsutra' ligation procedure.

In Chapter 30, named 'Granthi Arbud Shlipad Apachi Nadi pratisheda Adhyay',while describing Nadi vran chikitsa , Vagbhat has mentioned various medicinal wicks (Varti) to be tried to explore the track and/ or Medicated oil can be used for irrigation purpose (Nadi vran puran).

Further, in Nadi Vran management Vagbhat says-

ऽशक्य कृत्यामेषिण्याम भित्त्वाऽन्ते सम्यगेषिताम |
क्षारपीतेन सूत्रेण सहशो कारयेत गतिम | |

Patient who denies or not fit for surgery, in those people exploration of sinus can be done with the help of Ksharsutra and the same can be used to explore fistulous track also.

BHAISHAJYA RATNAVALI'-VIDYOTINI TIKA

In another text 'Bhaishajya Ratnavali', Vidyotini Tika (Commentary), Chapter 51- 'Bhagandar chikitsa prakaran', management of Bhagandar is described precisely as follows:

- Vaman, Virechan, Raktmokshan procedures are advised in un ripen stage.
- In established Bhagandar- Vran Varti (medicinal wicks) prepared from Snuhi latex+ Ark latex+ daruharidra can be tried.
- 'Triphala quath vran dhavan ' (Seitz bath) is advised.
- Nishaadyam Tailam, Saindhavadi Tail Vran-puran can be tried locally.
- Internally, Narayan ras, Saptavinshati Guggulu or Saptang Guggulu may be effective.

Further, in chapter 50 (Nadi Vran chikitsa) Author has demonstrated 'Ksharsutra' application procedure in brief-

एषणया गतिमन्विष्य गतिमन्विष्य
क्षारसूत्रानुसारिणीम |
सूची निकृष्याद गत्यन्ते बोन्नम्य चाशु निर्हरेत | |
सूत्रस्यान्त समानीय. . बन्धनमाचरेत |

The Ksharsutra embedded probe (resembling a needle with eye) should be introduced from the external opening of the Bhagandar and allowed to follow the track till internal opening. Further, it is smoothly taken out through the anal canal. While doing this the Ksharsutra is automatically placed in the track and then, two ends of the thread are brought together and tied.

Note

The Author has also mentioned indications of Ksharsutra in other hyperplasic conditions. It has been advocated to do free ligation of Ksharsutra at the base of pedunculated growth, fibroid, tumor etc. so as to achieve chemical excision.

अर्बुकादिषु बोद्धिप्य मूले सूत्रं निधापयेत |
सूचीभिर्वा यव यवाग्राभिराचितं वा समन्ततः |
मूलं सूत्रेण यष्टीवाछिन्ने बोपाचरेद व्रणम ||

KSHAR & KSHARSUTRA NIRMAN

The Ksharsutra Nirman i.e. process of preparation of Ksharsutra is described in 'Ras Tarangini', Tarang 24/527-530 and process of Kshar nirman is demonstrated in 'Ras Tarangini', Tarang 14/59-60.

सुधाकुम्ये पत्रपूतहविढा चूर्णसंयुते |
लिप्तिकेन तु तूलेन स्वल्पेन खलु यत्नतः | |
प्रलिप्त सुदृढ सूत्रं छायायाम ऽथ शोषयेत |
विलिप्य सप्तधा क्षेत्रं शोषयेद भिषजां वरः |
सूत्रमेतत समाख्यातं क्षारसूत्रं तु नामतः ||...५१०

PATHYA PATHYA

The Pathyapathya or Do's and Don'ts for Bhagandar pateint is advocated in Chapter 46/ 26 which are basically responsible for Agnimandya and can vitiate the Vaat dosh.

व्यायामो मैथुनं युद्धं पृष्ठयानं गुरूणि च |
संवत्सरं परिहरेत उपहरेत उपरुद्धव्रणो नरः||

1. Over exercise, 2. Over indulgence in sexual activity, 3. Strenuous work or fighting, 4. Excessive driving and 5. Heavy meal should be avoided for one year. post operatively.

❑❑❑