“A systematic review of recent advances of Agnikarma in the management of haemorrhoid”

Awasthi Suhas¹, Sakharkar Bhagyashri²

1. PG Scholar, Shalyatantra Department, Government Ayurved College, Nagpur,
2. Assistant Professor, bhagya.sakharkar@gmail.com, contact no.- 9890838948
3. Shalyatantra Department, Government Ayurved College, Nagpur.

*Corresponding Author: Email-suhas261293@gmail.com, contact no.-09028768673

ABSTRACT

Haemorrhoid means an abnormal mass of dilated and engorged blood vessel in swollen tissue that occurs internally in the anal canal or externally around the anus. Haemorrhoid is an extremely common problem reported since thousands of years with a prevalence rate that is highest among all the anorectal disorders. Haemorrhoid resembles with arsha in ayurveda. The disease arsha (piles) is initiated with agnimandya (Improper digestion) due to improper food habits and lifestyles. Agnikarma has been explained by Sushruta as one among the Anushastras having greater importance in the management of arsha. The purpose of this study is to explain the importance of agnikarma as parasurgical procedure in non surgical management of arsha.

Different samhitas, classical texts and modern texts are well scrutinized to study the recent advances of agnikarma in arsha. All the modern techniques of cauterizations are indirectly based on agnikarma.

In modern management different laser technique are used such as infrared coagulation, Bipolar cautery, direct current and radiofrequency ablation therapy and BEIM technology. 

Agnikarma in the management of arsha is widely used with recent advances.

Sushruta is the pioneer of Agnikarma.

Keywords: Agni Karma, Anushastras, Cautery.

Introduction

Ayurveda science enhances the life style disorder in various samhita. Because of
drastic life style number of disorders are growing up so rapidly. Now a days proctological disease are very common amongst population in every class of society. Arsha i.e. piles or haemmorhoid is also common.

Haemorrhoids are progressively increasing in the society. It is manifested due to multifold factors viz. disturbed life style or daily routines, addiction, improper diet intake, prolonged standing or sitting, irregular disturbed habits of defaecation etc. which results in Agnimandya leading to vitiation of Tridosha, mainly Vata Dosha. These vitiated Dosha get localized in Guda Vali and Pradhana Dhamani which further vitiates Twak, Mansa, and Meda Dhatu due to Annavaha shrotodushiti leads to development of Arsha.[1]

Specially in the management of Arsha different techniques are well explained in different ways by Sushruta and other Acharyas. Sushruta explained mainly four types of management in Arsha i.e. Bhesaja, Kshar Karma, Agnikarma and Shastra Karma according to chronicity.[2]

One of them most important, Agnikarma is a Para-surgical procedure in which Agni is used for intentional burning for therapeutic purpose. It is indicated for various vata kaphaj disorders.

Agnikarma is a highly potential procedure than the bhesaja shastra and kshara karma because of its non recurrence nature. so any complications and infection can be easily avoided.

**Instruments**

Instruments which are used for agnikarma as per classical literature including the following:

- **Twak dagdha**: pippali, godanta, shara, shalaka, excreta of goat
- **Mamsa dagdha**: jamostha shalaka and other metal shalaka like gold, silver, brass etc
- **Sira snayu sandhi** and **asthi dagdha**: warm honey, jaggery and sneha dravya [3]

**Appropriate season for agnikarma:** Agni karma can be done in all seasons except greeshma and sharad. In case of emergency it can be done in any season with special precautions.[4]

**Precautions taken during agnikarma:**

In case of certain diseases like ashmari bhagandara arsha and mukharoga agnikarma should be done in empty stomach.[5]

Generally, Agni karma should not be done in empty stomach. It is better to take picchila anna before agni karma.

**Classification of agni karma:** According to some Acharya agnikarma is of two types twak dagdha & mamsa dadgha. But according to dhanwantari sampradya sira snayu sandhi and Asthi are also involved in dagdha [6]
Twak dagdha lakshanas:
production of sound, foul smell, twak sankocha (contraction of skin at the site of dagdha)

Mamsa dagdha lakshanas:
kapota varnata (change in colour) alpa swayathu & vedana (little swelling & pain), suska sankuchita vranata (wound formed during dagdha is dry & of small circumference)

Sira Snayu dagdha:
black colour (krushnata), unnata vranata, srava sannirodha

Asthi sandhi dagdha:
ruksha, arunata, karkasha & sthira

Indication of agnikarma:
Arsha is ideally indicated for agnikarma by Sushruta. Other indications are sira roga, netra roga Diseases of twacha mamas, sira snayu, sandhi & asthi with severe pain due to vitiation of vata, bhagandara, arbuda, apachi, sleepada, charmakeela, tila kalaka, antravridhi, joint diseases, bleeding vessels and sinuses are treated with agni karma[7]

Different shapes of agni karma:
Agni karma should be performed in four different shapes.[8]
Valaya: round shaped
Vindu: dot like
Vilekha: linear cauterization
Pratisarana: irregular cauterization
According to Vagbhata three more types of cauterization are performed

- Ardha Chandra
- Swastika
- Astapada

Contra indication of Agni karma[9]
- Pitta prakriti individuals
- Antah shonita: Internal bleeding in arsha
- Bhinna kostha: Ruptured viscera
- Nudhrita shalya: in presence of foreign body
- Durbala: emaciated
- Baala: children
- Vridha: Old age
- Bheeru: patients with cowardice, mindset
- Aneka vrana peedita: affected with many infected wounds

AIMS AND OBJECTIVES
- To emphasis on the importance of Agnikarma in Arsha with recent techniques.
- To review the literature of Agnikarma in Arsha from Ayurvedic texts.

Classification of Arsha (Piles)[10]
1. On the basis of the origin:
   1. Sahaja (Hereditary)
   2. Janmottarakalaja (Acquired)

2. On the basis of the character of bleeding:
   1. Ardra (Sravi)- Bleeding piles due to vitiation of Rakta and Pitta Dosha.
2. Shushka—Non bleeding piles due to vitiation of Vata and Kapha Dosha.

3. On the basis of site:
   1. Bahya (samvarani)
   2. Abhyantara (visarjini, pravahani)

4. On the basis of prognosis:
   1. Sadhya (Curable)
   2. Yapya (Palliative)
   3. Asadhyya (Incurable)

Classification according to anatomical position

1. Internal haemorrhoid: It originates above pectinate line and covered with mucous membrane
2. External haemorrhoid: It originates below pectinate line and covered with skin.
3. Interno-external haemorrhoids: involving both mucous membrane and skin.

The above two variety may coexist simultaneously.

4. Primary haemorrhoids: The three classical position of the haemorrhoids are 3, 7, 11 O’clock. They are called as left lateral, right anterior and right posterior respectively.
5. They are due to the main branches of superior rectal arteries i.e. left and right branches. Left branch containing as a single vessel, while the right branch splits into anterior and posterior haemorrhoids.

6. Secondary haemorrhoids
   Additional haemorrhoids may be present between these main haemorrhoids at the position of 2, 5, 9 and 12’o clock position.

The classification according to the Prolapse:

- **1st degree** haemorrhoids are those which bleed but do not prolapse outside the anal canal.
- **2nd degree** haemorrhoids are those which prolapsed outside the anal canal during defecation and reduce spontaneously itself.
- **3rd degree** haemorrhoids are those which prolapsed outside the anal canal during defecation and goes back manually.
- **4th degree** haemorrhoids are those which permanently prolapsed outside the anal canal
- **Dagdha (burn) conditions**
  - Agni dagdha (conditions) are categorized as per the magnitude of dagdha, such as Plusta dagdha
  - Durdagdha
  - Samyak dagdha
  - Ati dagdha, When Agni karma is performed for therapeutic purpose
then the Dagdha must be Samyak dagdha.

- In samyak dagdha for local application vamshalochan, plaksha, lal chandan, sona geru and giloy should be applied with ghee and treatment should be given like pitta vidradhi.[12]

Remaining dagdha features and its treatment well explained by Sushruta.

After Agnikarma patients usually suffer from severe pain, burning sensations, appearance of large vesicles because of kupita agni vitiated rakta and because of same composition of pitta it also vitiates and produces features described above.

Acharya Shusruta has described agni karma in different surgical diseases in various chapters, in the management of wound under shasti upakrama he has included agnikarma.

Possible mechanism of action of Agnikarma in arsha[13]

Agni karma cures all vataj and kaphaja disorders as ushna guna of agni is opposite to that of vata and kapha dosha. According to Ayurveda every dhatu has its own dhatwagni and when it becomes low diseases manifest.

In this condition agni karma works by local thermal therapy which may increase tissue metabolism and leads to excretion of unwanted metabolites and toxins from the tissue i.e. piles and finally infected lesion is burned out.

Heat may stimulate lateral spino-thalamic tract which leads to stimulation of descending pain inhibitory fibers which release endogenous opioid peptides. These peptides binds with opioid receptors at substantia gelatinosa ronaldi which inhibits release of substance P (presynaptic inhibition) and blockage of transmission of pain sensation.

Modern day procedures based on Agnikarma

Cauterization

Cautery is a medical practice or technique of burning a part of a body to remove or close off a part of it. It destroys some tissue in an attempt to mitigate bleeding and damage, remove an undesired growth, or minimize other potential medical harm, such as infections when antibiotics are unavailable.[14] The practice was once widespread for treatment of haemorrhoids.

- To stop severe blood-loss
- Cautery was historically believed to prevent infection, but current research shows that cautery actually increases the risk for infection by causing more tissue damage and providing a more hospitable environment for bacterial growth.
Actual cautery refers to the metal device, generally heated to a dull red glow, that a physician applies to produce blisters, to stop bleeding of a blood vessel, and for other similar purposes.

The main forms of cauterization used today in the first world are electro-cautery and chemical cautery.

Cauterization was used to stop heavy bleeding, especially in case of bleeding pile mass. Cauterization was a common treatment in the Middle Ages, sometimes unintentionally as with Saint Hubert's Key. Cautery is described in the Hippocratic Corpus. The cautery was employed for almost every possible purpose in ancient times: as a counter-irritant, as a haemostatic, as a bloodless knife, as a means of destroying tumours etc. Later, special medical instruments called cautery were used to cauterize arteries.

**Electrocauterization**

Electrocautery also known as thermal cautery refers to a process in which a direct or alternating current is passed through a resistant metal wire electrode, generating heat. The heated electrode is then applied to living tissue to achieve haemostasis or varying degrees of tissue destruction.

The process of destroying tissue (or cutting through soft tissue) using heat conduction from a metal probe heated by electric current. The procedure stops bleeding from small vessels (larger vessels being ligated). Electro-cautery applies high frequency alternating current by a unipolar or bipolar method. It can be a continuous waveform to cut tissue, or intermittent to coagulate tissue.[16]

**BEIM**

BEIM tissue fusion sensing technology, uses the body's own collagen and elastin to create a permanent fusion zone. This technology can fuse vessel and monitor changes in tissue impedance and provides a real time adjustment control of the energy output, creating faster fusion cycles, more flexible fusion zone. Its introduction to the market in 1998, BEIM technology has set the industry standard for vessel sealing as used in more than 4 million procedures worldwide.

BEIM technology is using ‘Biological Impedence Electrical auto-measurement’, is a smart concept that able to produce controlled tissue fusion without carbonation. This technology is being rapidly developed into variety of modern surgery. BEIM pincers can intelligently auto-measure the impedance of haemorrhoids tissue and then act as sealing machines to seal the base of the haemorrhoids.
The major advantage of this technology is no bleeding, no open wound, no risk of infections and less pain as the nerve fibres is sealed in the tissue fusion[17]

RESULT:
As above literature gives the detail information of agnikarma in management of different disorders, then we came to know its importance and mechanism of action, specially in case of anorectal diseases agnikarma plays vital role in arsha. Nowadays, different methods are well developed in the management of arsha such as cautery, laser etc. but Achrya Sushruta already explained its mechanism of action and way of application in arsha.

DISCUSSION:
Every type of technique have its own different mechanism of action such as in case of electrocautery only tissue fusion with the help of heated electrode and in BEIM technology one important mechanism of real time adjustable control of energy output. Different techniques of agnikarma which are very ueful in variety of conditions specially in anorectal disorders well explained. In arsha sushruta enhances the the importance of agnikarma.

Reviewing above all literature data we came to know that the basic siddhanta of agnikarma stated by sushruta over years ago. On the basis of that siddhanta new variey of modalities are rapidly developed but the mechanism of action totally resembles the agnikarma.

CONCLUSION:
In the management of arsha different achrya stated different ways of management as we emphasis on agnikarma rather than other medical or therapeutic way of treatment due to its specialty of non recurrence so Sushruta is the main pioneer of agnikarma regards arsha.

Now a day’s number of methodology are available in the market such as laser technique, electro cautery etc. But, the basic phenomenon of Sushruta still now present in multiple faces of modern techniques. Above context helps us to evaluate that till now agnikarma plays vital role in the management of arsha (haemorrhoids).

SOME RELATED FIGURES:
REFERENCES:

1. Chaukhamba Subharti Prakashan, Varanasi, edition 2015, page no.475 Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1
2. Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol 2, Chaukhamba Subharti Prakashan, Varanasi, edition 2015, page no. 225
3. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.85
4. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.86
5. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.86
6. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.86
7. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.87-88
8. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.87-88
9. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.474
11. Ibid Dr. Anant Ram Sharma, Sushrut Samhita Sutrasthan vol. 1, page no.90

Cite this article:

A systematic review of recent advances of Agnikarma in the management of haemorrhoid

Awasthi Suhas, Sakharkar Bhagyashri