

A CONCEPTUAL STUDY OF AYURVEDA MANAGEMENT OF VEDANA (POST OPERATIVE PAIN) IN ANO RECTAL DISORDERS**Ramya R.*¹ and Shilpa P. N.²**¹Asst. Prof., Dept. of Shalya Tantra, Indian Institute of Ayurvedic Medicine and Research, Bangalore and Ph.D Research Scholar at Gamc-Bangalore, Karnataka, India.²Professor and Ph.D Guide, Dept. of PG and Ph.D Studies in Shalya Tantra, Gamc-Bangalore, Karnataka, India.***Corresponding Author: Ramya R.**

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ABSTRACT

According to the International Association for the study of pain (IASP), "Pain is an unpleasant sensory and emotional experience associated with actual potential tissue damage". Issues of pain management have captured the attention of both health care professionals and the public. Pain is at the most common reason individuals seek healthcare and chronic pain is the most common cause of long term disability. Surgery gives immediate relief from various diseases but the common outcome is the post operative pain, because of which patients don't want to undergo surgery, until and unless it is emergency. Since the anal region is sensitive area successful Post Operative Pain management is challenging for every Ayurveda Surgeons. Guda is one among Sadyoparanahara Marma the Vedana (postoperative pain) experienced in these cases is double the times of other regular post surgical pain. Also Acharya Sushruta defines Vedana (pain) as extreme discomfort as though affected by a blow over temporal area. Therefore the purpose of this review is to understand what vedana means according to Ayurveda and its various references mentioned in the classics, its classification, dosha factors in pain, description of postoperative pain and its importance, what are the principles and treatment modalities available in its management according to Ayurveda.

KEYWORDS: Ayurveda, Pain, Post Operative Pain, Vedana.**INTRODUCTION**

Postoperative pain of anorectal diseases is common among all kinds of anorectal diseases, including anal fistulectomy, anal fissurectomy and haemorrhoidectomy. Effective postoperative pain control is an essential need of every surgical procedure. Inadequate pain control may result in increased mortality. A strongly held misconception is that "Acute pain vanishes in a few days, and as long as the operation was successful, the acute postoperative pain will soon be forgotten". But still pain is often undertreated and improved understanding of pain mechanisms has advanced treatment of pain. Also this inadequate/underestimation of pain management might lead to poor management of post operative wound, which negatively affects patients quality of life. For the successful management of postoperative pain a surgeon should have clear and detailed knowledge about Vedana (Pain). This review reflects the Clinical aspects of Vedana (postoperative pain), its assessment & management according to Ayurveda.

VEDANA IN CLASSICS

Acharya Sushruta defines pain as "*Shanku sphotanavat teevra vedana*" - extreme discomfort as though affected with a blow over temporal area. The word *shoola* refers

to any type of pain like *Karna Shoola*, *Shira Shoola* and *Netra Shoola*. Shoola can appear as a symptom or complication of a disease. *Shoola* and *Roga* both have same meaning i.e Pain giving. Shoola is classified as *Swatantra Shoola* as Vyadhi itself and *Paratantra Shoola* as a complication of a disease. Shoola is explained as abdominal pain. It is also explained that shoola is the main complication of *Gulma*.^[2]

There is no specific chapter of pain or its related synonyms in the 'Bhrihatrayee' chapters during the description of diseases, either as *Purvarroopa* (prodromal symptoms), *Roopa* (signs and symptoms) or *Upadrava* (complications). From the very beginning in the *Bheshaja chatushka*, there is different medicinal preparations for the management of pain in different parts of the body. Acharya Charaka mentions *Shoolaprashamana*, *Vedanasthapaka* & *Angamardaprashamana Mahakashayas* which can be used in management of pain.

In *Madava Nidana*, Shoola and its types has been mentioned as a special chapter.^[3]

SYNONYMS

- Ruja
- Ruk
- Vedana
- Arati

DOSHA FACTOR EFFECTING VEDANA

In all the types of pain vata has a predominant role. while describing about process of paka in shotha Acharya Susruta explains that "*Vatadrute Nasty Ruja*^[4]", which means there is no pain without involvement of vata dosha. It is a unique quality attributed to vata dosha. Acharya Madhavakara also opines same in Madhava Nidana. Pain is mentioned as one of the atmaroopa and karma of vata that pain is always associated with Vata dosha.

"*Vivardhamaanastu sa maatarishwa ruja sutivra prajanoti kaya*^[5]" During description of Marmaghata, Acharya sushruta says vitiation and prakopa of vata causes acute pain in body.

CAUSES AND SYMPTOMS OF VEDANA

By above references we understand the factors which aggravate Vata Dosha will be indirectly aggravating

All these aggravated factors give rise to following symptoms

Table^[8]: 1

<i>Sankocha</i> - contraction	<i>parvanam stambha bhida</i> - stiffness of joints and pain.
<i>Loma Harsha</i> -Horripilation	<i>Pralapa</i> - Irrelevant talk.
<i>Pani prushta Shiro Graha</i> - Stiffness of hands, back and head.	<i>Kanja pangulya Kubjatwa</i> - lameness of hands and feet and hunch back, shortness.
<i>Anganam sosha</i> - Atrophy, emaciation of limbs.	<i>Anidra</i> - Insomnia
<i>Garbha shukra Rajonasha</i> - destruction of foetus, semen and periods	<i>Spandanam Gatra suptala</i> - twitching sensation and numbness in the body.
<i>Shiro Nasa Aksi Jatunam Griva Hrudanam</i> - shrinkage of the head, nose, eyes, clavicular region and neck.	<i>Bheda</i> - splitting pain
<i>Toda</i> - Pricking pain	<i>Arati</i> - Excrutiating pain
<i>Aaskshepa</i> - convulsions	<i>Moha</i> - unconciousness.
<i>Aayasa</i> - excess tiredness and similar other signs and symptoms.	-

Apart from the influence of tridoshic factors, there are other factor that may alter the nature of pain. The main ones are:-

- Dhatus invloved
- kosta and site involved
- specific functions of the tissue or organ involved.
- The mental state of the patient.

Vedana also. So understanding aggravation factors of Vata Dosha is important for successful management of Vedana (Post Operative pain) in Ano Rectal Diseases.

Some of the physical activities causing aggravation of vata dosha are *Ativyavaya* (excessive sexual indulgence), *Prajagara* (remaining awake at night in excess), *Vishamat Upachara* (inappropriate Panchakarma/other therapies), *Ati asruk sravana* (excess Raktamokshana or excess bleeding), *Ati plavana* (excessive swimming), *Ati langhana* (excessive fasting), *Atyadva* (walking for long distance), *Ativyayama* (physical activities or exercise in excess), *Dhatu samkshayat* (depletion of body tissues, loss of Dhatus), *Chinta Shoka karshana* (weakening due to excess stress, grief and worries), *Rog ati karshana* (excessive emaciation because of affliction of disease), *Dukhashayya* (sleeping over uncomfortable beds and sitting), *Vega vidharana* (suppression of natural urges), *Ama* (product of improper digestion and metabolism), *Marmaghata* (injuries to Marmas), riding over an elephant, camel, horse or fast moving vehicles.^[6,7]

- Environment factors, both endogenous and exogenous.

ASSESSMENT OF PAIN

Pain can be assessed by Sparshanasaatwam (tenderness)

CLASSIFICATION OF PAIN

Table 2: Varieties of pain mentioned in Samhithas.

Sl.no	Classification Criteria	Types of pain	Conditions
1	Duration of pain	Acute pain (<i>Ashukareshula</i>)	Acute spreading eruptions(<i>Visarpa</i>)
		Chronic pain (<i>Chirakarishula</i>)	Rheumatism due to Rakta/gouty Arthritis

			(<i>Vatarakta</i>) vitiated vata in sandhi/joint- Osteoarthritis (<i>Sandhigata vata</i>)
2	Site of Pain	Localised pain (<i>Ekangashula</i>)	Pain over low back region
		Generalised pain (<i>Sarvangashula</i>)	whole body pain
3	severity of pain	Superficial pain (<i>Uttana</i>)	Seen in Vatarakta disorders
		Deep pain (<i>Gambeera</i>)	
4	Dosha predominance	Vatika	Sciatica (<i>Gridrasi</i>)
		Paittika	Acute spreading eruptions (<i>Visarpa</i>)
		Kaphaja	Vata vitiation in mamsa/muscle
		Tridoshaja	-
5	Pain related in Organs	Viceral pain as a symptom of a disease	Stomach pain (<i>Udarashola</i>)
6	Nature of pain	Pain similar to scorpion bite (<i>Vrischikaivashula</i>) ^[9]	Rheumatoid arthritis (<i>Amavata</i>)
		Pain spreads fast like rat poison (<i>Aakhuvishamiva</i>) ^[10]	<i>Vatarakta</i>
		Slicing pain (<i>Krakachanivadaaryathe/Bheda</i>) ^[11]	Heart disease (<i>Hridroga</i>)
		Profound pain (<i>Avagadaruja</i>), cutting pain (<i>Todabahulam</i>) ^[12]	Diabetic carbuncles (<i>Prameha Pitaka</i>)

Table 3: Characteristics of Shoola according to Different Doshas.

SL.No	Type of Shoola	Nature of Shoola	Aggravating Factor
1	Vataja	Princking or tearing	During cold weather, in the evening, during or after digestion of food
2	Pittaja	Burning sensation	During midday, midnight, digestion, in rainy season
3	Kaphaja	Dull aching pain	Severe in mornings at sunrise, in Sishira and Vasanta, and after taking food.
4	Sannipataja	Severe pain	Severe form during all the times

Table 4: Site of pain due to aggravated Vata dosha.

SL.No	Site of aggravated Vata Dosha	Region of Pain
1	Kostha	<i>Parshva Shoola</i> (pain in flanks)
2	Sarvangakupita	<i>Gatrasphuranabhanjana</i> (twitching sensation and breaking pain the body), <i>Vedana</i> , <i>Paritaschasphutana</i> (feel as joints are getting cracked)
3	Gudagata	<i>GudagataShoola</i> (colicpain)
4	Amshayagata	<i>Hrutnabhiparshvaudararuk</i> (pain in cardiac region, umbilicus, sides of the chest and abdomen)
5	Pakvashayagata	<i>Pakvashayagatashola</i> (colic pain), <i>Trikavedanam</i> (Lumbar region pain)
6	Tvakgata	<i>Tudyate</i> (pricking pain in skin), <i>Parvaruk</i> (pain in joints)
7	Raktagata	<i>Teevraruja</i> (acute pain)
8	Mamsagata & Medogata	<i>Dandmushtihatma</i> (pain as being beaten by stick or someone) <i>Shramitatyartha</i> (exertional pain)
9	Asthimajjagata	<i>Asthibheda</i> (cracking of bones and joints), <i>Parvanamasandhishola</i> (piercing pain), <i>Satataruk</i> (constant pain)
10	Siragata	<i>Mandaruk</i> (Mild pain), <i>Shushyatespandayate</i> (emaciation and throbbing pain)
11	Sandhigata	<i>Prasaranaaakunchana pravritivedana</i> (pain during extension and contractions of the joints)

DESCRIPTION OF POST-OPERATIVE PAIN IN SUSHRUTHA SAMHITHA

Various techniques and drugs for management of pain is mentioned by Acharya Sushruta. Some of the factors responsible for the post operative pain mentioned are :

1. Excess pain present after shastra karma in *Bhagandara*.^[13]
2. Post-Operative pain in *Karna Vyadana*.^[14]

3. The severe pain caused by sharp instrument is treated by sprinkling warm ghee mixed with *Yastimadhu taila*.^[15]
4. Description of application of different drugs mixed with ghee in Post- Operative pain management in *Mudhagarbha*.^[16]
5. The presentation of pain depends upon the cause and type of *Vrana*.

MANAGEMENT OF PAIN IN AYURVEDA

"Vatadrute nasty rujah"^[4]

➤ Principles of Ayurveda Pain Management is mainly based on

- A. **Nidana parivarjana chikitsa**- to avoid the causative factors.^[17]
- B. **Nidanaviparit chikitsa**- treatment opposite to the qualities of causative factors.^[18]

C. **Dosha Taratamya**

Main Dosha for causing Pain should be eliminated first and that diagnosis is made on the basis of symptoms produced.

D. **Dhatu Kshaya**

Avarana concept- In case of Avruta Vata Dosha, the Dosha which covers the Vata dosha or Avarana is treated first. Vyatasya Chikitsa is indicated in case of Avruta Vata Dosha treatment i.e alternative cold and hot therapy is given to the patient.

E. **Dushya specific chikitsa**^[19]

- a. Rasadushtijanya vedana - Langhana, Deepana, pachana
- b. Raktadushtijanya vedana - Raktapittahara chikitsa, virechana, upavasa, raktamokshana
- c. Mamsadushtijanya vedana - Shastrakarma, Ksharakarma, Agnikarma
- d. Medodushtijanya vedana - Kapha-medohara chikitsa
- e. Asthidushtijanya vedana - Vatahara chikitsa, Basti chikitsa
- f. Majja-shukradushtijanya vedana-Madhura-tikta aushadha, shodhana
- g. Purishadushtijanya vedana - Atisara/ vibanda chikitsa
- h. Mutradushtijanya vedana - Mutrakricchra/prameha chikitsa
- i. Swedadushtijanya vedana - Jwara chikitsa

➤ **Chikitsa**

Shoola Nivarana - involves/includes reduce pain, ease discomfort and increases functioning of the affected part. Includes,

A. **Dravyabhoota Chikitsa**

B. **Adravabhoota Chikitsa**

C. **Shalya Chikitsa**

A. **Dravyabhoota Chikitsa** - Includes Ahara, Vihara, Shamana & Shodhana

- **Ahara** - Ayurveda considers that incompletely digested food produced toxins and impurities which are absorbed and travel throughout the body to localise in tissues to disrupt their function leading to chronic pain. Consumption of food that are

nutritious and easy to digest like green vegetables, fruit juices. Avoid oily, fried and spicy food.

- **Vihara** - Yoga approaches to relax, energize, remodel and strengthen body and psyche. The Asanas and Pranayama harmonize the physiological system and initiate a "Relaxation Response" in the neuroendocranial system. This consists of decreased metabolism, quicker breathing, stable blood pressure, reduced muscle tension, lower heart rate and slow brain wave pattern. As neural discharge pattern gets modulated, hyper arousal of the nervous system and static load on postural muscle come down. The function of viscera improves with the sense of relaxation and step gets deeper and sustained, fatigue diminishes. Sleep and Meditation also helps individual deal with emotional aspects of Chronic pain, reduce anxiety and depression effectively and improve the quality of life perceived.
- **Shamana Chikitsa** - Includes drugs like Shoolahara, Vedanasthapaka and Vatanulomaka group of drugs. Main Ayurvedic formulations such as Angamarda, Shoola Prashaman and Vedanasthapaka Mahakashaya are mentioned in Charaka Samhita.^[20] The Angamarda Mahakashaya can be prescribed for Angamarda (body ache) in both Dhatukshaya and Margavrodhjanya vataprakop. Shoolaprashamiya Mahakashaya has Ushna property, hence, useful in abdominal colic; whereas, Vednasthapak Mahakashaya has Kashaya Rasa and Sheeta virya can be used effectively in pain management due to traumatic conditions. Other Ganas mentioned for management of pain include Vidarigandadi, Varunadi, Viratvadi, Pippalyadi, Eladi, Shyamadi, Bruhatyadi, Kakkolyadi, Ushakadi, Parushakadi, Lakshadi, Laghu and Mahat Panchamoola.
- **Shodana Chikitsa (Purification methods)** - Includes panchakarma therapies as Snehana, Swedana, Kashaya Dhara, Abhyanga, Basti, Agnikarma, Lepa, Raktamokshana, Nasya, altogether eliminate the burden of inflammatory signaling molecules, promote cellular cleansing and induce healing from the root of disease.

B. **Adravabhoota Chikitsa**- Includes activities of Physical, Mental/Psychological, Spiritual and Religious. Adravabhoota Chikitsa is complementing therapy in some diseases but can also be a mainstay approach or a part of it in some conditions.

C. **Shalya Chikitsa** - Includes,

- Agnikarma (Athyugra ruja)^[21]

- Lepa^[22]

- Raktamokshana/ visravana procedure (Jaloukavacharana & Siravyada)^[23]

MANAGEMENT OF POST-OPERATIVE PAIN MANAGEMENT ACCORDING TO AYURVEDA

Table^[24]: 6 -According to Sushruta Samhitha, different techniques for pain management.

Sl.No	Condition	Treatment
1	Vrana	Dhoopana
2	Vranashopha	Alepa
3	Vranashopha, Sadyovrana, Bhagna, Bhagandara	Parisheka
4	Sadyovrana (Chinna Vrana)	Snehana
5	Ghritha vrana	Nirvapana
6	Sadyovrana	Snehapana
7	Tanu, Sravi, Apakwa vrana	Snehana, Swedana and Utkarika

Post-operative pain is a specific type of acute pain that inevitably causes tissue trauma and release of potent mediators of inflammation and pain. Poorly managed post-operative pain could potentially hamper the daily routine of the patient. Failure to manage the same precisely could lead to its chronicity. Vata prakopa (aggravation of vata dosha) inevitably follows the process of abhighata (injury), here in the context shastra karma janita abhighata (post operative tissue injury). Thus the management of *shastra karma janita vrana* (post operative wound) should focus on *prakupita vata dosha shamana* (pacification of aggravated vata), *shoolaharana* (reduction in pain) and *vrana-ropana* (wound healing).

CONCLUSION

The effective relief of pain is of the utmost importance to anyone treating patients undergoing surgery. Management of Post-operative pain relieve suffering and leads to earlier mobilization, shortened hospital stay, reduced hospital costs, and increased patient satisfaction. For successful Post-operative pain management one should have detailed about Vedana (Pain) first. This article explores the concept and importance of Vedana/Shoola (Pain) in Post-Operative pain Management which is discretely described in different places in classical texts of Ayurveda. The treatment modalities such as Dravyabhootha, Adravabhootha and Shalya chikitsa karma, are discussed here. Vedana occurs due to vitiation of Vata Dosha. Vata Dosha is vitiated by Srotas Avarodha (obstruction of channels) and Dhatu Kshaya (depletion of tissues/malnutrition). Use of modern pain killers has significant side effects like nausea, vomiting, constipation, gastric irritation, drowsiness and urinary retention. So pain therapies which effectively subside pain, stiffness, swelling and tenderness of affected part, enhance circulation, promote strength, improve mobility and provide comfort enabling to carry out daily activities without hindrance. Aim of the treatment in Post-Operative pain is to pacify vitiated Vata Dosha. Ayurvedic pain management therapies are safe and natural ways that help in the management of Post-Operative pain. If wound heals then automatically pain reduces. Increase in the pain threshold and reduction of the cause of pain and wound healing is a whole new approach towards pain in Post operative cases.

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