

Snehapana by Ghrita for post fissurectomy pain- A review article.

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Abstract

Postoperative pain in ano-rectal conditions is always a point of concern for surgeons. Ayurvedic *Guggul* and other herbo-mineral preparations have limitations in managing severe pain of acute origin like trauma or postoperative pain. Post fissurectomy wound can be considered as a *Sadyovrana*. Surgical trauma causes vitiation of *Vata Dosha* leading to pain in the operated wound. In Sushruta Samhita, internal oleation (*snehapana*) has been advocated for the management of pain in *Sadyovrana*. Amongst other *sneha dravyas*, *Ghrita* is palatable to all ages (*Satmya*). *Snehapana* by *Ghrita* is indicated in traumatic wounds caused by weapons and in burning pain. It increases digestive fire (*Agnideepan*), pacifies vata and pitta helps in tissue repair after injury. Thus *Ghrita* can be useful for fissurectomy pain management.

Key Words: *Snehapana*, *Sadyovrana*, fissurectomy pain, *Ghrita*, postoperative pain, *Chhinna Vrana*

Introduction

Pain is an important symptom of many medical conditions and is the commonest cause for visit to doctor. It disturbs daily routine of a person and compromise life quality. Patients are afraid of the disease condition with which pain is associated. Diseases requiring surgical intervention are feared for postoperative pain involved in it. Ano-rectal conditions are infamous for after-surgery pain.

Pain management has always been an important task for medical professionals. Drugs with good analgesic properties and minimal side effects have been developed over years in the contemporary medical system. In the ancient system of medicine also drugs are abundant with anti-inflammatory properties, however, due to a lack of intramuscular or intravenous route and potent analgesic properties, Ayurveda physicians and surgeons have to depend on allopathic drugs for pain management. Side effects like gastritis and nephrotoxicity associated with NSAID make them unsafe for regular use. *Guggul* preparations and *Rasaushadhi* (mineral compounds) are good enough to manage mild to moderate chronic pain. But severe pain of acute origin like trauma or postoperative pain cannot be managed by these preparations only.

Sadyovrana is a wound caused by some external trauma. Fissure in ano with a sentinel tag is a very common ano-rectal condition. Surgical treatment is the excision of fissure which is associated with significant pain (1). This post fissurectomy wound can be considered as *Sadyovrana*. Acharya Sushruta has advocated *snehapana* (internal oleation) for the management of pain in *Sadyovrana* (2). Internal oleation is normally used as pre-purification procedure of emesis (*vaman*) and purgation (*Virechan*) also as pacifying lipid for vitiated doshas, but *snehapana* as a modality of treatment for pain relief after fissure surgery has been reviewed in this article.

Methods

Various procedures and medicines are described for pain management in Ayurveda e.g. *Agnikarma*, bloodletting (*Raktmokshan*), *Parishek*, oleation internal/ external (*Snehan*), fomentation (*Swedan*) (3). Mostly local applications of various *ghrita* like *Yashtimadhu Ghrita*, *Panchtikta ghrita* have been used for fissurectomy pain. *Matra Basti* of various oils and *Awagah Swed* (sitz bath) is also used in few postoperative conditions like hydrocele (4) and hemorrhoids (5) and found effective. But they are not sufficient as a single modality to manage post-surgery pain. There are studies on postoperative anal pain by medicines like *Karmardadi yog* (6) and *Patha-Yavani yog* (7) however trial drug was not found to have a significant effect compared to the standard group.

Various search results of '*Snehapana* in surgery', '*Snehapana* in fissure', '*Snehapana* in *Sadyovrana*', '*Snehapana* for pain management', 'internal oleation in surgery' on various search engines did not show any study carried out. So the concept of internal oleation (*Snehapana*) on postoperative pain was not evaluated before. However few lipids formulations like *Panchtikta*

ghrita, Guggul tikitak ghrita have been established for their anti-inflammatory properties by animal and experimental studies. To explore rationality in this topic literature search was carried out in Ayurved Samhitas.

Sadyovrana is a wound caused by external factors like falls, beating by a rod or stick, stabbing by a knife, spear, etc. According to Ayurveda, there are 6 types of *Sadya Vrana* viz. *Chhinna*, *Bhinna*, *Viddha*, *Kshat*, *Pichchit*, *Ghrushta*. Among these, four wounds viz. *Chhinna* (incised/excised), *Bhinna* (stabbed), *Viddha* (punctured), *Kshat* (lacerated) wounds have more pain and bleeding(8).

Chhinna vrana is a wound in which some sort of excision of a body part is done. Generally, the shape / alignment of the wound is longitudinal axis straight or oblique. Depending upon the severity of the injury structures are involved. Skin, subcutaneous tissues, capillaries, superficial to deep fascia, the muscle layer, ligaments, tendons, vessels and even bone is affected accordingly.

According to *acharya* Sushruta treatment for these *Sadyovrana*, is concoctions of fatty or oily liquids for internal oleation and similar preparation in warm state should be used for local fomentation. Properly prepared *Krisharas* and *Veshavaras* with plenty of clarified butter or oil in it should be used for poultice. *Masha* and other pulse should be used for fomentations. Decotions of drugs subduing *Vata* along with oily substances should be used for preparation of various enemas to be applied (9).

Amongst all the above treatments, *snehpana* is the only orally advised modality with unique benefits. *Sneha* (lipid) is the essence of an individual and his or her life. *Snehana* (oleation) is of great importance in Ayurveda for therapeutic and prophylaxis purposes. It can be broadly divided into *Bahya Snehana* i.e. external oleation and *Abhyantara Snehana* i.e. internal oleation. *Snehapana* means internal administration of lipid substance which comes under *Abhyantara Snehana* and it is the oral consumption of *Sneha Dravya*. *Sneha Dravya* is a substance containing lipid predominantly. It can be *Taila* (oil), *Ghrita* (ghee), *Majja* (bone marrow) and *Vasa* (muscle fat) individually or in combination.

On the basis of therapeutics, *Snehapana* can be classified based on their action 1. *Shodhana* (purifying), 2. *Shamana* (pacifying), 3. *Bruhana* (nourishing). *Snehapana* done before purification procedures like *Vaman* (emesis), *Virechan* (purgation) is called *Shodhana*

Snehapana. For the thin build, old age, and debilitating condition *Bruhana Snehapana* is done. To pacify the disease condition, *Shamana Snehapana* is done.

A fissure in ano is a vertical crack in the anoderm distal to the dentate line. Teared anoderm exposes internal sphincter muscle beneath it. There is a muscle spasm that fails to relax. Fissures cause pain and bleeding with defecation. Fissurectomy is the surgical treatment that involves the excision of a fissure bed along with its fibrosed edges, associated sentinel tag and hypertrophied anal papilla if any. This Postoperative fissurectomy wound can be considered a surgeon-induced *Chinna vrana*. Anal area being muscular and rich in nerve and blood supply, surgery at this region involves substantial damage to muscle tissues. Fissurectomy along with excision of sentinel tag is associated with injury to the skin, mucosa, submucosa and sphincter. Thus significant pain is associated with it.

Discussion

According to Ayurveda pain is associated mainly with *Vata Dosha* (10). Vitiated *Vata Dosha* leads to different types of pain. There are various causes for the vitiation of *Vata Dosha*. Amongst them, *Aaghat* and *Dhatukshaya* are two important causes (11). In any surgical procedure, tissue injury or trauma which is a sort of *Aghat* is obvious thing. Intraoperative bleeding refers to *Dhatukshaya*. So there is vitiation of *Vata Dosha* resulting in pain in postoperative wounds. As already discussed Acharya Sushruta has advised *Snehapana* in *Sadyovrana*. Acharya Charak has also advised *Snehapana* as a treatment for vitiated *Vata Dosha* due to *Dhatukshaya* (12).

Snehapana means internal administration of lipid substance, oral consumption of oil / ghee (Internal oleation).

Postoperative pain being the main factor of consideration, *Shamana* type of *Snehapana* for the pacification of *Vedana* (pain) should be done. There are two more types of internal oleation 1. *Achchhapan* 2. *Vicharana Sneha*. *Achchhapan* means when only a lipid substance like ghee or oil is used for oleation. In *Vicharana Sneha* ghee /oil lipids are given along with edible food items like rice, milk, chicken soup, etc. *Achchhapan* in which lipids get digested early and give good results should be done for Post fissurectomy pain.

Amongst 4 types of *Sneh Dravya* i.e. *Taila* (oil), *Ghrta* (ghee), *Majja* (bone marrow) and *Vasa* (muscle fat), *Ghrta* is superior. Due to *Dhatukshaya* there is *Agnimandya* (13) and *Ghrta* is one of the best Agnideepan (14). *Ghrta* is *Madhura* in *Vipaka*, *Sheeta-Virya* has properties

like easy to digest (*Laghu*), pacifying *Vata* and *Pitta*, palatable to all ages (*Satmya*), increases digestive fire (*Agnideepan*). It provides strength to the body (*Balya*), improves the general condition of the body and acts as a rejuvenator of the body (*Vrishya* and *Vayasthapaka*). Useful in the condition associated with Pain (*Shula*), fever (*Jwarahara*) and infections by microorganisms (*Rakshoghna* / *vishaghna*), also (15). It improves the quality of *Ras*, *Shukra* and *Oja dhatu* thus *Ghrita* nourishes body, helps in tissue repair and increases immunity (16). Most importantly *Ghrita* is said to be useful in traumatic wounds caused by weapons and in burning pain (17). *Ghrita* is more appropriate *snehadravya* for postoperative pain as surgical excision of tissue followed by coagulation using electro-cautery involves trauma as well as burn injury to the patient. Apart from internal oleation, the local application of *Ghrita* is helpful to relieve post-surgical pain. *Acharya* Sushruta has advised the use of *Yashtimadhu churna* and *Ghrita* on surgical wounds (18).

Ghrita:- Chemical analysis of *Ghrita* states mostly it as saturated fat. It composed of sixty two percent saturated and twenty nine percent monounsaturated fat respectively. CLA (conjugated linoleic acid) is a trans-fat having fatty acid useful for health.

Ghee is also contains various vitamins like A, E, K and D. DHA which is a useful omega fatty acid is also present in small proportion. DHA helps to reduce risk of heart problems, malignant changes in body, improve insulin sensitivity and arthritis (19).

Ghrita is a commonly used medicine in Ayurveda. According to Ayurvedic literature, oral consumption of *Ghrita* helps to maintain healthy long life and also prevents from various illness. *Ghrita* also ensures *Vatanulomana* which means guiding the direction of *Vata* downward thus vitiation of *Vata* which is an important cause of pain is avoided. *Snehapana* produces unctuousness in the body which allows easy and smooth movement of fecal matter through the anal canal. Hence postoperative fissure pain can be minimized. *Ghrita* improves fire of digestion and thereby enhances absorption and assimilation of food. It nourishes *Dhatus* and body tissues like nerves, muscles and provides lubrication to joints. DHA and other anti-oxidants are responsible for most of these functions of *Ghrita*.

Ghrita being *Sanskarasyanuvartanat* can adopt properties of other drugs prepared with it. So a drug processed with *Ghrita* leads to its ester formulation. In such ester formulation crystalline form of drug is converted into amorphous form. It also helps in micro ionization of drug and increases absorption. The lipid cell membrane facilitates the passive diffusion of drugs

through *Ghrita*. Medicated Ghrita preparations can have more bioavailability compared to other water-soluble drug preparations and also attains maximum concentration of drug inside the cell (20).

Conclusion: Owing to the properties aforementioned, prophylactic *Snehapana* with *Ghrita* to nourish the body tissues preoperatively could be planned. *Ghrita* can pacify vitiated *vata dosha* in the body and thereby it can decrease the severity of postoperative pain. Doses of analgesics required for pain management will be less. *Snehapana* with *Ghrita* will also help in the healing of the wound and improving postoperative quality of life.

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