

# Agnikarma in Shalyatantra

<sup>1</sup> Dr.Meghana Rajendra Borawake, <sup>2</sup> Dr. Shilpa Badhe

<sup>1</sup>PG Scholer, Department of Shalyatantra, SMBT Ayurveda College and Hospital, Nashik

<sup>2</sup>HOD & Guide, Department of Shalyatantra, SMBT Ayurveda College and Hospital, Nashik

**Abstract:** Agnikarma, or heat cauterization, is one of Ayurveda's Anushastras (surgical tool substitutes) or para-surgical techniques. It is said to offer total relief in some chronic ailments that aren't treated by herbal treatment, surgery, or alkaline cauterization. Ancient Indian surgeon Sushruta prescribed various materials such as Pippali (pipperlongum), Ajasakrut (goat's excreta), Godantha (cow's tooth), Shara (arrow), Shalaka (metal rods), Kshoudra (honey), Guda (jaggery), Sneha (oil/fat) etc. for cauterizing specific body parts such as skin, muscle, blood vessels, ligaments, etc. based for various illness conditions, appropriate material should be selected according to the surgeon's rationale. Agnikarma has a multi-faceted effect on the body. Because of its Tikshna (rapid action), Ushna (hotness), Sukshma (subtle), Vyavayi (fast spreading), and Vikashi (works without being metabolised) properties to eradicate Srotorodha (obstruction in channels of body), it is usually employed in Vata and Kapha diseases. The fundamentals of Agnikarma are attempted to be revealed in this essay.

**Keywords:** Agnikarma, Anushastra, Shalya tantra, ayurveda

## INTRODUCTION

The word Agnikarma consists of Agni + Karma i.e. Heat + Procedure. "When Samyaka dagdha Vrana produced by Agni with the help of various Dravya called as Agnikarma".<sup>1</sup> Shaman and Shodhan Chikitsa are two types of Chikitsa in Ayurveda. Ayurvedic Samhita mentions a variety of medical procedures such as Ksharkarma, Lepamam, and others. Ayurveda describes Agnikarma as one of the most significant procedures. Patients in today's fast-paced world need immediate relief from every suffering. Agnikarma is one of the quickest methods for reducing Vedana (pain). Agnikarma is described in several Samhitas. All information included in Charak, Sushruta, Vagbhata, and Harita Samhita, from meaning to indication, contraindication, and superiority. In his commentary, Acharya Dalhana explains the several

forms of Agnikarma. According to Dalhana, it may be done in an emergency and in any season. However, measures such as covering the affected area with damp clothing, eating cold meals, and applying cold pastes all over the body must be taken in order for the pitta vitiation to be counteract by the cold treatments. In practice, Agnikarma can be used as Pradhana Karma and Paschat Karma of many surgical procedures. Agnikarma is the best among Shastra, Kshyara and Agnikarma because; it prevents reoccurrence <sup>[1]</sup> and restores hemostasis during the procedure <sup>[2]</sup>.

Aim and objective:

- To elaborate and to discuss the concept of Agnikarma in shalyatantra.

Methodology:

- Literatures will be collected from different classical Ayurvedic texts, modern surgical books and from journals.
- The details of Agnikarma technique are discussed in details.

Literature review

Definition: The word Agni is derived from the Dhatu 'Agativyapnoti' <sup>[3,4]</sup> – it means, which spreads very quickly to everywhere. "Agnina Kritva Yat Karma, Agne Sambandhi VaYat Karma, Tat Agnikarma" <sup>[5]</sup>. The word Agnikarma has been used in different context with different meanings. In Ayurveda Agnikarma, stands for the Karmas, which are done by using Agni that means procedure done with the help of Fire.

Classifications and Types of Agnikarma-

Agnikarma is classified in to three types depending on the Desired Dhatu Dahana.

Those are

- Twak Dagdha,
- Mamsa Dagdha
- Asthi, Sira and Snayu Dagdha.

Depending on the Consequences of Dahana [6, 7].  
Agnikarma is of four types.

- Tuchha/ Tuttha Dagdha, Plustha Dagdha- In this condition, there will be Burn of Twak (Skin) with severe burning sensation. The lesion will be blister less.
- Durdagdha is achieved due to improper handling of the Agnikarma, which leads to formation of blister and severe pain.
- Atidagdha is characterized by muscle spasm, denudation or destruction, burning sensation, Dhoomayana, pain, thirsty, fainting, deep wound, destruction of Sira Snayu and even death.
- Sudagdha / Samyagdagdha- it is said to be Sudagdha, When purpose of Agnikarma is achieved that is restoration of hemostasis, Twak Daha sound, Lasika Yukta srava, Pakwa Tala Phala vat Varna, Mild pain with less Healing time.

According to Location of Dahana karma, Agnikarma can be classified in to;

- Sthanika- Dahana Karma is done at the Lesion or at the disease site, like Puyalasa, Pakshmo-paradha, Upapakshma, Arsha and Arbuda of Urdhwajatru etc.
- Stanantariya that is Dahana Karma done distant to the site of lesion, Ex. Gridhrasi

#### BASED ON THE DISEASE

- In disease like Kadara, Arshasa etc where Agnikarma is done after Chedana karma (Surgical excision)
- In disease like fistula, sinus etc Agnikarma done after Bhedana karma (Surgical incision)
- In krimidanta condition, Agnikarma after filling the cavity with guda (jaggery), madhuchista (beewax) etc.

#### INDICATIONS OF AGNIKARMA

Acharya Sushruta explained a set of conditions where Agnikarma is fruitful. Such as the pain aggravated by vata in Tvacha, Mamsa, Sira, Snayu, Sandhi and Asthi. In Chronic wound having some hard elevated tissue. Cystic lesion, hemorrhoids, tumour, fistula, sinus lymphadenopathy, filarial, skin tag, hernia, joints disorders. He also indicated Agnikarma to stop bleeding from cut vessels.<sup>[8]</sup>

#### CONTRAINDICATIONS OF AGNIKARMA –

- Agnikarma can be done in all the seasons of the year except in Sharad (Autumn) & Grishma (Summer).<sup>[9]</sup> All types of pittaja and raktaja disorders, patients with concealed bleeding, Intestinal Perforation, retain foreign body, weak person, children, old age person and patients with multiple wounds and who are not fit for Swedana Karma are rendered unfit for this procedure.<sup>[10]</sup>
- Acharya Charaka mentioned Agnikarma should not be done in Vrana of snayu, marma, Netra, kushta and vrana with visha and shalya.<sup>[11]</sup> Also mentioned in Ashtanga hrudaya that Agnikarma should not be employed in persons who are contraindicated for Kshara karma<sup>[12]</sup> Just like any procedure in Ayurveda, Agnikarma should be properly done in three steps i.e., purva karma, pradhana karma and paschat karma, each of this is important for the successful outcome of the procedure.

PURVA KARMA The procedures and preparations carried out before performing out the Pradhana karma is called purva karma.

Pre Agnikarma Assessment: A physician, after having carefully analyzed the seat of the disease and examining the individual for the strength, locations of the Marma, disease and season should resort to Agnikarma.<sup>[13]</sup>

Pre Agnikarma Diet: In all diseases and in all seasons, the patient should be fed on a diet which is Picchila before Agnikarma; While the patient should be on empty stomach before the therapy, in case of Mudhagarbha (malpresentation of fetus), Aśmari (renal stones), Bhagandara (fistula-in-ano), Udara (ascitis), Arsa (haemorrhoids) and Mukha Roga (diseases of oral cavity).<sup>[14]</sup>

PRADHANA KARMA - Agnikarma should be initiated with Swasthikvachan towards the patient (Consoling the Patient); the patient kept in suitable position by keeping head in the East direction and held by expert assistants to avoid movement. Then the surgeon should make the different shapes of Agnikarma viz Valaya, Ardhechandra, Swastika, etc. as per need by heated Shalaka in a smoke free fire of Khadira or Badara. During this period if patients feel discomfort he should be comforted by courageous, consolations talk, provided cold water for drink and

sprinkle cold water & procedure of Agnikarma should be done till production of complete cauterization/Samyak Dagdha. Once the pradhana karma is carried out, it is important to assess the Samyak dagdha lakshana i.e. signs and symptoms of proper cautery.<sup>[15]</sup>

#### SAMYAK DAGDHA LAKSHAAN<sup>[16]</sup>

- Anaawagadhavranata (wound which is not deep)
  - Talaphalavarnata (colour resembling the Fruit of tala tree)
  - Susamsitavrana (without elevation or depression)
- Acharya Sushruta has also explained the signs and symptoms according to various dhatus ♣ Twak Dagdha (on skin)<sup>[17]</sup> - Shabdapradurbhava (produce sound) } Durghandata (Bad odour) } Twak Sankocha (Contraction of the skin)
- ♣ Mamsa Dagdha (on muscle) } Kapotavarnata (Colour like that of pigeon i.e., dark grey) } Alpa swayathu (mild swelling) } Sushka sankuchit vranata (dry, contracted wound)
  - ♣ Snayu Dagdha (on ligament) } Krishna vranata (black coloration) } Unnata vranata (elevation) } Srava sannirodha (cessation of discharge)
  - ♣ SandhiAsthi Dagdha (on joints and bones) } Ruksha (Dry) } Arunata (Red colour) } Karkasha (Rough) } Sthira vranata (Firmness of ulcer)

#### PASCHAT KARMA<sup>[18]</sup>

- Acharya Sushruta prescribed the application of Madhu (honey) and Ghrita (Ghee) after the Agnikarma procedure. Further he also explains use of Paste of Tugakshiri, Plaksha, Chandan, Amrita & Gairika with Gritha can be used as ointment for local application. Paste of flesh of some animals like horse, pig etc may also be used as lepa /ointment for local application. (For local as well as internal medication). If person doesn't get relief from above medicine then the surgeon should follow the line of treatment like Pitta Vidradhi.<sup>[19]</sup> Madhuchisth ghrita prepared by processing of wax, in ghrit with Yashtimadhu, lodhra, raal, sarjras, manjistha, rakta Chandana and murva.<sup>[20]</sup>

#### MODE OF ACTION OF AGNIKARMA

- ♣ The diseases in which Agnikarma is indicated are mainly due to vitiation of vata and kapha, hence

Agnikarma is considered as better therapy to pacify these doshas. Due to Ushna, Sukshma, thekshna and Ashukari Guna of Agni, it pacifies vitiated vata and kapha dosha.

- ♣ As per Acharya Sushruta basically Agnikarma can be used in two manners i.e., one for Roga Unmulana (diseases cure) and other for Vedana Shamana (Pain Management). In Roga Unmulana (diseases cure) Agnikarma is used in assistance with surgery and for pain management, Agnikarma is used independently.
- ♣ It also destroys the Vitiated tissue on wound surface by its mechanical burn causing thermal injury. In this way it promotes the healing in chronic non healing wounds.<sup>[21]</sup>

#### AGNIKARMA IN VARIOUS SHALYA TANTRA VYADHI -

Agni karma in Sadyo vranata: Wound that developed after limb excision during trauma should be treated with Agnikarma using hot oil and then bandaged in the manner of kosha Bandha followed by appropriate Ropana Karma.<sup>[22]</sup>

Agnikarma in Granthi: A Granthi occurring in any part of the body other than a marma, which is not suppurred, should be opened and cauterized with fire.<sup>[23]</sup> According to Sushruta A Kaphaja Granthi on any part of the Body other than a Marma & not resolved should be incised even in its nonsuppurred stage and removed. The expert surgeon should then cauterize the incidental wound after the arrest of bleeding and later followed by sadyavranata treatment.<sup>[24]</sup>

Agnikarma In Kaphaja Arbuda: When only a small remnant (of the tumor) remains after the worms have eaten, the area should be scraped and cauterized by Agnikarma.<sup>[25]</sup>

Agnikarma In Upadamsha: The putrid portion of the penis should be excised and the remaining part should be completely cauterized with Jambaoshta Shalaka, made red hot by Agni.<sup>[26]</sup>

Agnikarma in Ashmari Vrana & Other Conditions: Agnikarma is one among the Shashti Upakrama. When there is bleeding in the basti after removal of Ashmari then Agnikarma should be done for RaktaStambhana.<sup>[27]</sup>

During Surgical Procedure Any Bleeding Spots Should be Controlled by Agnikarma. If there is Bleeding After an Injury from the cut ends, it should be Cauterized by using Agnikarma.

Agnikarma in Chippa & kunaka: After Draining the Pus by cutting it with knife if the Disease does not Subside then the affected part should be cauterized with Agni and an oil prepared with decoction of the drugs of the Madhura (Kakolyādi) Gana should be applied for healing. The same course of treatment should also be employed in a case of Kunakha (bad nail).<sup>[28]</sup>

Agnikarma in vrudhi: If the intestines have descended down to inguinal region (Vamkṣaṇa), it should be cauterized with a heated Ardha-candra Salaka (crescent-mouthed rod) to prevent its descending down into the scrotal sac.<sup>[29]</sup>

Agnikarma in Jatamani, Mashaka & Tilakalaka: The seats of affection should be scraped and gradually and judiciously cauterized by applying Kshara or Agnikarma in case of Jatamani, Mashaka & Tilakalaka.<sup>[30]</sup>

Agnikarma in hemostatic measure: Is one among the Raktasthambhana upaya i.e., sandhana, skandhana, pachana and Agnikarma. Agnikarma has the property of Contraction of Sira (Vein) i.e., Sira-Sankochana. With any of the three of these preceding measures a physician should try to check the flow of Rakta, the process of cauterization should be resorted which is considered as the best among the four and should be used as last resort. Acharya Sushruta mentioned Dahana Karma as one among the Raktasthambhanopaya, Currently in Modern Surgery as well Agnikarma is Utilized in the form of Cauterization for Haemostatic Purpose During Surgery.<sup>[31]</sup>

Agnikarma in Charmakila: Acharya Sushruta has given Agnikarma Chikitsa in the disease Charmakila which can be correlated with warts in modern science on the basis of visual appearance<sup>[32]</sup>, Acharya Charaka explained Charmakila as Adhimamsa and also advocated Agnikarma Chikitsa for Adhimamsa.<sup>[33]</sup>

Agnikarma in kadara (Corn): In Kadara, the lesion should be excised and cauterised with heated oil.<sup>[34]</sup>

Agnikarma in bhagandara (Fistula-in-Ano): In Samanya Chikitsa of Bhagandara. after the orifice is identified, it is cut/incised by a sharp instrument; If that (incising) is not possible, then it should be Treated by Agnikarma (heated rod) or by Ksharakarma; this treatment is common for all varieties of fistula. It is further explained all discharging Nadi (Channels) in the affected region should be cauterized with fire by the surgeon.

Agnikarma in Arshas (Hemorrhoids): Agnikarma is indicated in Karkasha (rough), Sthira (fixed), Pruthu(thick/broad) and Kathina (hard) type of Arshas. These features of arshas can be correlated to Sentinel Tag of Chronic fissure in ano and external hemorrhoids.

#### CURRENT PRACTICE OF AGNIKARMA-

In Current Practise of Agnikarma, the shalaka is modified with the heat source being electricity. The Shalaka has different shaped probe for various specified use. This is used in various conditions like corn, warts, sentinel tag etc. CAUTERIZATION-MODERN CONCEPT The medical practice of cauterization is the burning of a part of a body to excise or close off a part of it, which destroys some tissue in an attempt to stop bleeding and remove an undesired growth, or minimize other potential harm, such as infections.

ELECTROCAUTERY - Though the term Electrocautery and Electrosurgery are used synonymously, they are different. o Electrocautery uses electrical current to heat a metal wire that is then applied to the target tissue in order to burn or coagulate the specific area of tissue. o Electrosurgery passes electrical current through tissue to accomplish a desired result. The electricity used is a form of alternating current similar to the that used to generate radio waves.

#### DISCUSSION

Agnikarma works by virtue of its guna but in some places it works by mechanical degeneration of tissue. Acharya Sushruta indicated Agnikarma in Arbuda, bhagandar, Nadivrana and dushtavrana. Here Agnikarma works by its power of destroying the Unhealthy granulation tissue by heat. In contemporary Science also Agnikarma has been enumerated in different forms such as monopolar, bipolar electrocautery. Acharya Sushruta mentioned Agnikarma as one among Raktasthambhanopaya, now in modern surgery also Agnikarma is utilized in the form of cauterization for haemostatic purpose. Acharyas mentioned different materials to perform Agnikarma in different structures for the temperature regulatory purpose.

## CONCLUSION

The Technique and Equipment have become advanced by time but the basic principle of Agnikarma remains the same. Agnikarma therapy is result oriented to Vataja and Kaphaja disorders. due to its ushna, sukshma, asukari guna it pacifies the vata kapha dosa and removes Srotavarodha. Patient is effectively relieved from pain and other associated symptoms. Since it is good measure for haemostasias it is also employed in emergency cases. There will be no recurrence of the disease which are managed by Agnikarma. According to Acharya Sushruta when bhashaja chikitsa, kshar chikitsa and shastra chikitsa are unable to cure the disease then Agnikarma can be used to treat the disease successfully.

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