

Agnikarma

Ācārya Suṣṛūta has dedicated a full chapter on Agnikarma based on the principles of Āyurveda and age old experiences to manage many diseases including pain related to Asthi-Sandhigata Vāta (Musculoskeletal pain). The result of Agnikarma are unparalleled and the principles lie behind it are still to be explored to establish it as a simple, effective and complication free treatment modality for managing musculoskeletal pain. This therapy guides us towards the drugless i.e. non-pharmacological approaches for the management of musculoskeletal pain where non-steroidal anti-inflammatory drugs (NSAID) and other drugs fail to provide satisfactory and acceptable result.

DEFINITION

The word Agnikarma consists of Agni + Karma i.e. Heat + Procedure.

“When Samyaka Dagdha Vrana produced by Agni with the help of various Dravyās called as Agnikarma”.

In various procedure heat is used directly or indirectly all these are come under the Agnikarma. Agnikarma is effective and superior among all surgical procedure. In Agnikarma heat is transferred to the body by various Dravyās.

Agnikarma has important role in the Vātaj and Kaphaj Vyādhi involving the Dhātu that are predominant with Pṛuthvī and Āap Mahābhūta. On the basis of Lok Purūṣa Sāmnaya Sidhānt Agni that exit in the body (Bhūtāgni, Dhāt-wāgni, etc.) have similar properties that exit outside the body.

HISTORICAL GLIMPSES

Regarding the Agnikarma Cikītsāvarious references are available in the Āyurvedic literature.

VEDIK PERIOD:-

Since Vedic period, Agni Karma is in practice to treat the human ailments.

Rugaveda:

Agni Karma has been indicated in the context of Obestratic disease. (Rig. – 10/162/1-4)

YajurVeda:

Agni is accepted as a treatment of śeeta. (Yaju- 23/10/1) In Sāma Veda, the importance of Agni is proved by the presence of a chapter known as “AgneyKanda”.

Atharva Veda : -

Agni is accepted as God and Bhaiṣaja in context of Krimi. (Athar. – 5/23/1,3,5)

Sāmaveda:-

Importance of Agni is proved by the presence of the chapter known as Agneykanda.

Caraka Saṃhitā:

Caraka also explained Agnikarma Cikītsāin Divivarniya Ādhyāya Chikītsā as a treatment of Vrana¹, Agnikarama Cikītsā described in Vidhiśhoṇita Ādhyāya², Kaphaja Gulma³, Śvayathu Cikītsā⁴, Udara Cikītsā⁵, Arṣa Cikītsā⁶, Visarpa Cikītsā⁷, Viṣa Cikītsā⁸, Vātavyādhi Cikītsā⁹, Ardhāvabhedaka Roga Cikītsā¹⁰ respectively according to Avāstha of Vyādhi.

Suṣṛūta Saṃhitā:

Ācārya Suṣṛūta has given great contribution to Āyurveda regarding Agnikarma Cikītsā. Now days this Agnikarma procedure is modified scientifically as electric cauterization which is used for various therapeutic purposes starting from minor surgical procedure to major surgical procedure. Ācārya Suṣṛūta described in Śonitavarnaniya Ādhyāya, four types of procedure (Sandhāna, Skandana, Pācana, Dahana) have mentioned to control bleeding. Dahana is the last procedure for stoppage of bleeding when others three procedures are failed. Blood less surgery is evolved from this principle. Many references are available in Suṣṛūta Saṃhitā regarding Agnikarma. Suṣṛūta Saṃhitā Sūtrasthān 12 described in deTaila Agnikarma Cikītsā. Agnikarma is mentioned as Upayantra and Anuśaṣṭra¹¹. Vāta Vyādhi Cikītsā Adnikarma is mentioned for the mangment of Sirā, Snāyu, Asthī, Sandhi Vikāra (Agnikarma is one of the upkarma for the ArṣaCikītsā¹². Agnikarma Cikītsā has mentioned to control discharge from Bhagandara¹³, Granthi¹⁴, Kṣudra Roga Cikītsā¹⁵, Mukha Roga Cikītsā¹⁶. In Suṣṛūta Kalpasthāna in the context of one of 60 Upakarma of Vrana and one Important reference about importance of Agnikarama¹⁷.

AṢṬĀNGA SANGRAHA:

In A. S. Sū. 40 deals with Agnikarma Vidhī and there are many other references of other diseases regarding Agnikarma.

Aśtānga Hṛūdaya:

In A. H. Sū. 30 deals with Agnikarma Vidhi and there are many other references of other diseases regarding Agnikarma.

Harita Saṃhitā:

In Harita Saṃhitā, Agnikarma indicated as a important types of treatment out of eight types of treatment

Cakradatta:

Cakradatta has explained the Agnikarma the Cikītsā of Vāta Vyādhi.

Yogarātnākara :

Yogarātnākara has explained Agnikarma regarding the Vāta Vyādhi.

Other Ācāryas, Śarangadhara, Gadaniḡraha, Vangasena, Bhāvaprakaśa also mentioned Agnikarma Cikītsā in the management of various disease.

Dahanupakarana (Yantra For Agnikarma):

Dahanupakarana are the instrument to produce therapeutic burns (Samyaka Dagdha) during Agnikarma Cikītsā. They are classified as follows according to various Ācārya¹⁹.

Pippali ,Ajāta Śakṛut ,Godanta ,Kṣāra,Śalākā,Jambavaṣṭha,Dhātu,Madhu,Madhuciṣṭa
Guda,Vasā,Ghruta,Tailaam,Yaṣṭimadhu,Suchī,Varti,Suryakānta

Agnikarma Śalākā :

Above-mentioned Dahanupakarāṇa are distributed in three groups.

- 1st group is useful in Agnikarma Cikītsā of Twak Dhātu (skin).
Pippali,Kṣāra ,Ajaśakṛuta,Śalākā,Godanta
- 2nd group is useful in Agnikarma Cikītsā of Maṃsa Dhātu.
Jambauṣṭha, other Loha
- 3rd group is useful in Agnikarma Cikītsā of Sirā, Snāyu,
Madhu,Guda ,Sneha

Pippali: it is a well know herbal drug, used in dry form. Fruit is used for medicine. Pippali is helpful in Dahankarma of skin, for maśaka, Tilakālakā, Carmkila.

Ajā śakṛut: this is the fecal matter of goat, used in dry condition. Again it is used for Tawak Dagdh.

Godanta: “teeth of cow” is also used in Twakdahan.

Kṣāra: red hot tip of iron made arrow was used in Agnikarma of skin.

Suryakānta: it is mentioned for Tawak Dagdh. It is a transparent stone. Sun rays after passing from it converge at one point, which lead to Dahan karma.

Madhu: this animal product is produce by honey bees. It is indicated in the Agnikarma of Śirā, Snāyu, Sandhi and Asthī.

Madhucciṣṭa (bee wax): this animal product is indicated in the Agnikarma of Śirā, Snāyu, Sandhi and Asthī Guda: this herbal product used for Agnikarma of Śirā, Snāyu, Sandhi and Asthī Sneha: there are four type of Sneha, such as Tailaa Ghruta, Vasā and Majjā. It is indicated in the agnikarma of Sirā, Snāyu, Sandhi and Asthī.

Jambvoṣṭha: this one type of Śalākā Yantra. It is used in Agnikarma of Maṃsa Dhātu Śalākā :in this Śalākā of various Dātu are used to give therapeutic burn.

Classification of Agnikarma:

According to shape:

In this classification is based upon the figure produced in the skin after Agnikarma Cikītsā.

According to Śuśrūta²⁰:

Ācārya Suśrūta mentioned four types

- 1) **Valaya (circle):** Agnikarma done at the site of disease in circular manner.
- 2) **Bindū (dot):** In this the tip of Śalākā Yantra is heated till red hot and applied at the site of Vikṛutī in the shape of dot.
- 3) **Vilekhā (parallel line):** In this line in zig zag manner are produce with red hot Śalākā at the site of application of Agnikarma.

4) **Pratisārana (rubbing):** In this affected part is rubbed with red hot Śalākā Ardhcandra Aṣṭāṅga Sangrahaḥāra mentioned three more types with addition to that of Suśrūta.

- 1) **Ardhcandra:** In this Śalākā of semi circular tip is red hot and applied to affected area.
- 2) **Swastika:** In this swastika shaped Yantra is used for Agnikarma
- 3) **Aṣṭapāda:** In this making eight line with red hot Śalākā crossing each other at a single point.

According to Depth²¹:

Ācārya Suśrūta classify it only two type

1. Twak Dagdha
2. Maṃsa Dagdha

But Ācārya Suṣṛūta_ and Vāgbhata explain Agnikarma can be done according to the involvement of dhātu.

1. Twak Dagdha
2. Maṃsa Dagdha
3. Śira-Snāyu Dagdha
4. Sandhi-Asthī Dagdha

1.Twak Dagdha: when Agnikarma is applied to the skin there will be a sound production, Durgandha and Twak Sankoca.

2.Maṃsa Dagdha: when Agnikarma is applied to the Maṃsa it will give rise to black color like pigeon, pain, little swelling and incidentally ulcer becomes dry and contracted.

3.Śira-Snāyu Dagdha: when Agnikarma is applied to the Śira-Snāyu the ulcer is elevated, black in color with stoppage of all secretion.

4.Sandhi-Asthī dagha: when Agnikarma is applied to the Sandhi-Asthi ulcer is red in color, rough, dry and hard.

Samyak Dagdha Lakṣaṇa:

Samanya Lakṣaṇa

Ana-Awagāḍha Vranatā (Wound which is not deep)

Talpalā Varnata (Fruit of Tala tree-blue-black in color)

Suśamiṣṭa Vrana (Without elevation or depression)

Special Symptoms of Samyaka Dagdha Vrana Related to Skin :

Special Symptoms of Samyaka Dagdha of Skin are as follows:-

- ✓ Śabdapradurbhao (Production of sound)
- ✓ Durgandhatā (Bed odor)
- ✓ Twak Sankoca (Contraction of the skin)
- ✓ Special symptoms of Samyaka Dagdha Vrana Related to Maṃsa Dhātu
- ✓ Kapotvarnatā (Color like that of pigeon i.e. ashy, dark grey)
- ✓ Alpa Śwayaṭhu (Mild swelling)
- ✓ Alpa Vedana (Less pain)
- ✓ Śuṣka Sankuchit Vranatā (Dry, contracted wound)

Special symptoms and signs of Samyaka Dagdha Vrana related to Sirā, Snāyu –

- ✓ Kṛṣṇa Vranatā (Black coloration)
- ✓ Unnata Vranatā (Elevated)
- ✓ Srava – Sannirodha (Stoppage of discharge)

Special symptoms and signs of Samyaka Dagdha Vrana related to Sandhi, Asthī–

- ✓ Rukśatā (Dryness)
- ✓ Arunatā (Dark red coloration)
- ✓ Karkaśata (Roughness)
- ✓ Sthiratā (Stability)

ACCIDENTAL BURNS / ITRATHA DAGDHA:

According to Suśrūta Āgantuja Dagdha are of four types

- 1) **Pluṣṭha dagdha:** Pluṣṭha dagdha is that in which color of applied area is changed.
- 2) **Durdagdha:** Durdagdha is that in which Sphoṭa (blebs, vesicles) appear, accompanied with severe pain, burning, redness, Pāka and pain subsiding after a long time.
- 3) **Samyaka dagdha:** Ācārya Suśrūta__ mentioned Sāmānya Lakṣaṇa (common symptoms) produced in any type of Dhātu (tissue) and special symptoms are only related to the Dhātu concerned.
- 4) **Ati Dagdha:** due to excessive application of heat
 - ✓ Maṃsa-Avalāmbana (Hanging, burnt tissue)
 - ✓ Gātra-viśleṣa (Parts become loose and useless)
 - ✓ Destruction of Śirā, Snāyu, Sandhi (Tendons in joints)
 - ✓ Jwara (Fever)
 - ✓ Dāha (Burning)
 - ✓ Pipasā (Thirst)
 - ✓ Murchā (Unconsciousness)
 - ✓ Wound heals after a long time and healed ulcers have discoloration.

Agni Karma Kāla²² (Suitable Time):

Agnikarma can be done in all seasons, except Śarad (autumn) and Grīṣma (summer); it because of, in Śarad there is a Prakopa of Pitta and Agnikarma also aggravates Pitta and

it may be lead Pitta Prakopa, due to this reason Agnikarma is contraindicated. Even in these seasons it can be done in diseases of emergency, after adopting counter methods.

Dalhaṇa mentions covering the body or the site of branding with moist cloth, use of cold foods and applying pastes which are cooling etc. as counter methods to mitigate the effect of burning.

Agnikarma Procedure :

- **Pūrva Karma :**

Indication of Agnikarma :

Vātakantaka , Śīroroga , Ārdhāvabhedaka, Vratma Roga , Pakṣmakopa , Śliṣṭa Vratma ,Viśavratma , Alajī , Arbuda , Puyālāsa ,Abhīsyanda , Adhīmantha , Lagana Medoj Oṣṭharoga , Danta Nādi , Krimīdanta, Adhīdanta, Shitadanta, Dantavruddhī , Jalārbuda , Arśa, Nasa Arśa Karnarśa ,Lingarśa , Yoniarśa ,Bhagandara , Cipa Kunakha,Kadara , Valmika , Jatumani , Maṣaka, Tilakālaka, Carmakīlāi ,Vātajaśūla Viśwācī ,Galaganda , Gandamālā ,Apaci , Granti , Antravruddhī , Ślipada , Nadīvrana Upadvanśa ,Gulma , Vilāmbikā ,Sanyāsa , Unmāda ,Yakruta & Plīhodara, Śoṇita Atipravrutti ,Śirā Sandhi Cheda ,Visarpa,

Contraindications of Agnikarma :

Pitta Prakrutī ,Bhinna Koṣṭha ,Daurbalya ,Vruddha ,Antah Śoṇita ,Anuddhratā Śalya Bāla,Bhīrū ,Multiple Vrana ,Bālaka Who is contraindicated for Swedana (sudation) therapy Swedana is contraindicated for the person and suffering from – Pāndu,Atīsara ,Kṣaya,Guda Bhruṃṣa,Udara Roga,Nāsa Sanga ,Chardī ,Śoṣīta Who Has Taken Alcohol Oja Kṣaya ,Vidagdha,Rakta Pitta ,Sthūla,Ajīrna ,Krodhā,Trusṇa ,Ādhyā Rogi ,Garbhīni Prameha ,Rūkṣa ,Daurbalya,Viṣa ,Kṣudhā ,Timīra ,Kṣata

According to Caraka Agnikarma should not be done in the Vrana of Snāyu, Marma, Netra, Kuṣṭha and Vrana with Viṣa and Śalya.

Proper instrumentation (Agropaharaṇiyāni)

The Agnikarma room should be well prepared with all required Agropaharaiyanī described by Ācārya Suśrūta.Go-Gruta, swab holding forceps, Plota (gauze piece), Pichu (cotton), gas stove, Tāmraśalākā (which is used for present study) etc. are kept ready for use.

To make patient fit for Agnikarma (Pre-operative assessment):

Take informed consent: It is advisable to take written informed consent of the patient before going to Agnikarma as it gives information regarding the procedure to the patient and relatives also it is useful in medico-legal cases in favor of the physician.

- **Pradhāna Karma :**

Āsana for Agnikarma: In Jānusandhigata Vāta position of patient , it is easy to do Agnikarma in supine position as well it is comfortable to the patient.

Consideration of the site for Agnikarma: site for Agnikarma is considered carefully keeping in mind the position of marma. In Jānusandhigata Vāta, Agnikarma has done at the site of maximum tenderness at Knee joint .

To make Samyaka Dagdha Vrana: After carefully considering the symptoms of the disease, the vital spots and the strength of the patient, disease and seasons, the physician should undertake to Agnikarma. (Su. Su. 12/12). On the diseased skin of the patient, the Samyak Dagdha Vrana was produced by red hot Tāmraṣalākā. The number of the Samyak Dagdha Vrana was according to the extent of the diseased area in my study it is only one. After making Samyak Dagdha Vrana immediately apply Go-Gruta to subside burning pain.

Inspection of defective Agnikarma and management:

Pluṣṭha Dagdha: If the Śalāka is not properly heated then Pluṣṭha is produced.

For Pluṣṭha warming the body (increasing the body temperature) and administration of drugs/medicines of hot potency should be done; when the temperature of the body becomes increased, the blood becomes liquefied; water by nature is cold in potency and so makes the blood thick (coagulate) hence heat only gives comfort.

Warming the body again which has been burnt by fire has been advocated with the intention of maintaining the fluidity of blood and its circulation normally; this would ensure quick relief of symptoms. On the other hand application of cold water, making the blood thick hinders its circulation – is the opinion of Dalhaṇa.

Durdagdha: When the physicians have unskilled hand or patient is shaking his body parts due to fear of burn then Durdagdha may occur.

In Durdagdha the physician should resort to both warm and cold therapies, application of ghee, poultices and bathing the body should be done in cold state only.

Ati-Dagdha: This complication is produced due to more heat which is transferred from the red hot Śalāka to the diseased part.

In Ati Dagdha the torn (hanging loose) muscles should be removed (by cutting) followed by cold therapies, then the physician should apply the paste of broken rice, bark of Tindukī mixed with ghee or cover the wound with leaves of Guduchi or aquatic plant (like lotus etc.) all the treatments similar to that of Visarpa of Pitta origin should be done.

Madhuchīṣṭhadi Ghrita contains Madhuchīṣṭha, Madhuka, Lodhra, Sarjarasa, Manjīṣṭha, Candana and Murva, should be macerated together and then cooked with ghee, is best for healing of wound in all kinds of burns.

Dāha (burning): More or less burning pain is experienced by each and every patient who uses to take Agnikarma Cikītsā. This may be treated by of Go-Ghruta application.

- **Paścāt Karma :**

Pathyā Apathya & Follow Up: In Agnikarma procedure, we made Samyak Dagdha Vrana (therapeutic burn). It is necessary that it could be heal without any complications. So, all the Pathya-Apathya which described by Ācārya Suṣṛūta should be advised. It is most advisable to the patient that “Do not touch water to the Samyak Dagdha Vrana for Ahoratra (24 hours)”. The complete Ropana (healing) on the Vrana should be observed.

Duṣṭha Vranat (Sepsis of wound): After Agnikarma, it should be observed for any complications. If there may sepsis in the wound, treat the patient accordingly.

Agnikarma Śreṣṭhatā²³:

Agni (fire) is better than Kṣāra in action of burning; it is said so, because disease treated by burning will not recur again and also because those disease which are incurable by the use of medicines, sharp instruments and Kṣāra will be cured by Agnikarma.

The surgical excision should be done with the sharp instrument, which is heated by Agni with benefit of asepsis; otherwise there will be sepsis by unheated instrument. By these virtues Agnikarma is having greatness than other procedures. Agnikarma is one of the methods to control Haemorrhage.

Agnikarma In Modern Era:

In modern medicine era, there is no use of therapeutical burn i.e. Samyak dagdha vrana. But on the other hand, use of Agnikarma for other way around is used now days.

There are procedures as mimic to Agnikarma are practiced in modern era.

Electrocautery :

It is a most useful instrument in surgical procedure which consists of platinum wire can be heated to red hot by using an electric current.

Use of this electric cautery to cut the tissue or to coagulate the bleeding points, so this application of electro cautery is ideal for removing small skin tags, papiloma and also to control the bleeding during surgical procedures.

Diathermy :

The basic principle is to deliver high frequency current to the human body by means of active electrode and this after passing through the tissue to be diathermied returns via a return electrode.

The intense heat produced by the passage of current destroys it in different ways depending on the type of current used cutting current is undamped and produce cutting effect secondary to intense heat generation within the tissue. It is hemostatic and no bleeding can occur. Coagulating current is highly damped and coagulates by tissue dehydration its effect is mainly hemostatic. Blended current is a combination of two types of waves introducing both cutting and coagulating effects. Most new surgical units deliver low voltage cutting or blended current from a solid state generating unit through an isolated bipolar system which is considered the safest.

Radiotherapy:

In the type heat energy in the form of radiation are use to various disease e.g. in malignancy radiotherapy is given.