



RESEARCH ARTICLE

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AGNIKARMA: A Reference Manual for Ayurvedic Physicians - Information Directly Extracted from Approximately 3000 Years Old Literature

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ABSTRACT

Agnikarma is a time-tested Ancient Treatment modality, practiced in India for more than three thousand years. The procedure primarily involves a topical application of controlled heated rod of specific qualities to treat various kind of diseases and or disorders. However, this technique involves a paradigm shift to understand the process protocols and mechanisms. Without a grasp of its fundamentals, practice in modern labs and clinics is impossible. Though we present here a practice that has been so far limited to only *Ayurvedic Physicians*, the authors offer this paper without changing the meanings via specific word to word translations into modern language, with the intention that the dimensions of the ancient approach are retained without defragmentation. The authors present this paper to encourage modern scientists and doctors to further explore this ancient paradigm. A glossary is provided at the end of this paper for reference.

Keywords: Agnikarma, Old Literature, Ayurveda, Ancient Science

Introduction

The word "Agni Karma" comprises of two terms 'Agni' and 'Karma', which represents fire and procedure respectively. Collectively, it can be defined as a procedure with the aid of fire [1]. In Ayurveda, Agni Karma is referred to as a treatment that involves heat burns. It is also referred to as "Dahan Karma" in some texts. In modern words, "Agni Karma" therapy can be closely associated with "Intentional Heat Burn Therapy". A clinical study that demonstrates the benefits of Agnikarma has already been exclusively published in this journal in an earlier issue by the authors [2]. Since this practice has been there for few thousand years, it is considered safe similar to acupuncture treatment that is widely accepted and practiced. Therefore, this type of treatment modality is legalized

for practice in the Indian sub-continent.

Agnikarma has been cited for varied purposes in the ancient texts, beginning from the Vedic period [1750–500 BCE]. In *Atharvaveda* Agnikarma is indicated for *Krimi Chikitsa* [3] and the word 'Agni' is used as 'Bheshaja' [4]. In *Rigaveda* Agni is used as 'Bheshaja' for the treatment of disease [5] and Agni in 'Yagnya' is indicated to kill the bacterias which cause disease [6]. The diseases which are incurable by *Shastrakarma* (surgical operation) or *Ksharakarma* (Ayurvedic herbal medicine) can be easily cured with Agnikarma. The disorders treated by Agnikarma have no recurrence [7]. In *Charaka Samhita* - *Sutrasthana* - Agnikarma is used as a '*Trasana Chikitsa*' for the management of '*Sanyasa*' [8] and used as a remedy for the management of '*Mansagata Vyadhi*' [9]. In *Sushruta Samhita* - *Sutrasthana*, Agni is described under *Agropaharaniya* equipment [10]. Agni is described under '*Anushalya*' [11] and a whole chapter is dedicated to Agnikarma including details, description, indication, contraindication and *Vidhi* [12]. In *Sushruta Samhita* - *Chikitsasthana* - Agnikarma is included

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under 60 *Upakrama* [13] and Agnikarma is indicated in case of *Asthi*, *Snayu*, *Sandhigata Vataprakopa* [14].

Materials and Methods Used for Agnikarma-Dahnopakarana

In the classic texts, various forms of *Dahnopakarana* have been described with great clarity. *Dahnopakarana* refers to accessories used during Agnikarma procedure that includes, but not limited to drugs, articles and substances used for the Agnikarma Process. Each of these accessories has its unique property and application in *Dahnopakarana*.

Acharya Sushruta has listed the materials according to the site of Agnikarma i.e: 1) *Twakadagha*: *Pippali*, *Ajasakrida*, *Godanta*, *Shara*, *Shalaka*, 2) *Mamsadagha*: *Jambhavsta* *Shalakla* and Other Metals and 3) *Sira*, *Snayu*, *Sandhi* and *Asthidagha*: *Madhu*, *Jaggery* and *Sneha*. According to Acharya Vagbhata, *Godanta* and *Suryakanta* should be used for *Twakadah*. *Madhu*, *Sneha*, *Jambavastha* and *Jaggery* should be employed for Agnikarma of *Arsha*, *Bhagandara*, *Granthi* and *Nadivrana*. Besides above-mentioned accessories, ancient texts have referred to usage of different kinds of fire wood for heating purpose [Khair and Badar].

The selection of *Dahnopakarana* and the amount of Agni depend on the condition and site of the disease. It has been mentioned that Agni should be smoke [insert space] free (*Nirdhoom*) and sufficiently hot for heating up *Dahnopakarana*. It is been also mentioned that for catabolic or degenerative diseases, gold or silver probes should be used; similarly in anabolic and hyper growth conditions, *Pancha dhatu* or iron probe should be used.

Classification of Agni Karma:

There is no clear description available regarding its classification, but it can be classified on various factors according to 1) dravyas used, 2) location of the site, 3) nature of disease 4) the type of *akriti* (shape and or image) and 5) dhatus to be cauterized.

Table 1: Matrix of different Dahnopakarana Parameters as described in the Ancient texts.

Sr.No	Dahnopakaran Names	Su	Cha	A. S	A. H
1	Pipal	+	-	+	-
2	Aja Shakrida	+	-	+	-
3	Godanta	+	-	+	+
4	Shara	+	+	+	+
5	Shalaka	+	-	+	-
6	Jambavastha	+	-	+	+
7	Other metals	+	-	+	-
8	Kshaudra	+	+	+	+
9	Madhuchhista	+	+	+	-
10	Jaggery	+	-	+	+
11	Sneha	+	-	+	+
12	Loha	+	-	+	-
13	Ghrita	-	+	+	-
14	Taila	-	+	+	-
15	Vasa	-	+	+	-
16	Majja	-	+	-	-
17	YastiMadhu	-	-	+	-
18	Suchi (Needle)	-	-	+	-
19	Hema (Gold)	-	+	+	-
20	Tamra	-	-	+	-
21	Rajata	-	-	+	-
22	Kansya	-	-	+	-
23	Varti	-	-	-	+
24	Suryakanta	-	-	+	-
25	Ardhendu Vaktra Shalaka	+	-	+	+
26	Kalasthidala Tulya Shalaka	+	-	+	-

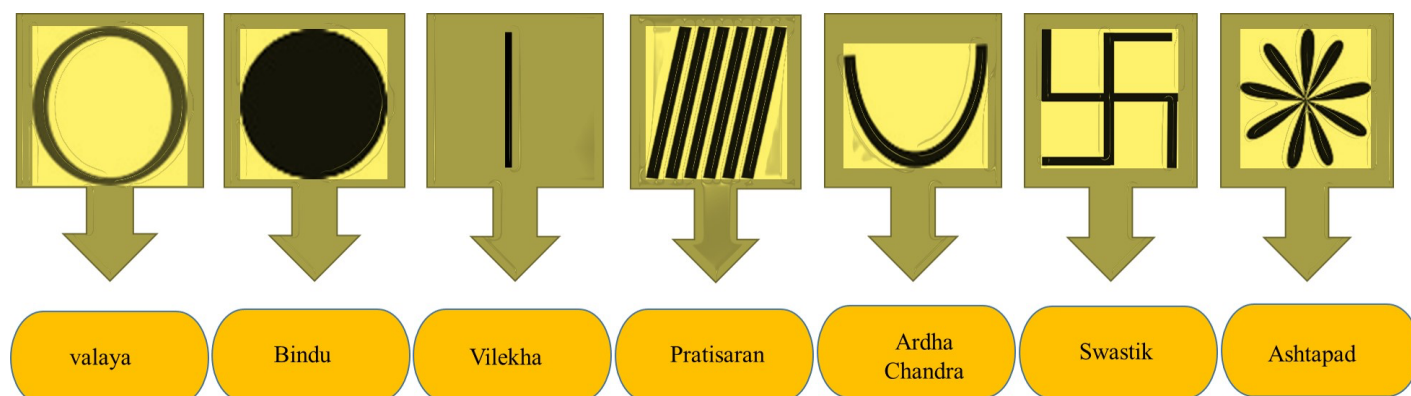


Figure 1: Types of Agni Karma according to different tip shapes

i. According to Dravyas Used:

- Snigdha Agni Karma:** Performed by the means of *Madhu* and *Ghrta* and *Taila*. According to *Sushruta*, they should be used for *Sira* and deep structures like *Snayu*.
- Ruksha Agni Karma:** Performed by *Pippali*, *Shalaka*, and *Ajasakrida*. According to *Sushruta*, they should be used for *Twaka dagdha*.

ii. According to the Site:

- Shthanika (Local):** As in *Vicharchika*, *Arsha* etc.
- Shthanantariya (Distal to the site of disease):** As in *Visoochika* and *Apachi*.

iii. According to the Disease:

- There are so many types of Agni Karma. For instance, for diseases such as *Arsha* and *Kandara*, it should be performed after surgical excision. In the case of *Sinus*, *fistula* and in *ano* it should be performed after incision.
- In *Krimidanta* it should be done after filing the cavity by *Jaggery*, *Madhuchhista* etc.

iv. According to Akriti:

Acharya Dalhana has clearly discussed the shapes of AgniKarma in his commentary [15] "*Dalhana's Commentary on Sushruta's Sushrut samahita*" [16]. According to Dalhana, *Shalaka* should have a pointed tip. There are seven different shapes noted to be used that includes 1) *Valaya*: shaped like a circular ring 2) *Bindu*: shaped like a circular disk, 3) *Vilekha*: It is made of various shapes by a heated *shalaka* as shown in Figure 6, 4) *PratiSarana*: Does not have a specific shape and requires the indicated site to be rubbed with a heated *Shalaka*, 5) *Ardhchandra*: shaped like a crescent, 6) *Swastika*: specific shape of a *Swastika Yantra* and 7) *Astapada*: It contains eight limbs in different directions. The first 4 shapes are described by *Sushruta*, whereas the last 3 shapes are described by *Vagbhat-Ashtang Sangrah Sutra* sthan Chapter 40/4 [17]. *Akriti* should be treated as the shape of *Dahnopakarana* and final shape produced after actual Agni Karma procedure.

v. According to Saptha Dhatus:

According to Acharya *Sushruta* and *Vagbhata*, Agnikarma should be carried out with the aid of the *Saptha Dhatus*. Accordingly Acharya *Vagbhata* asserts the following: 1) *Twaka dagdha*, 2) *Sira* and *Snayu dagdha*, 3) *Mamsa dagdha* and 4) *Asthi Sandhi dagdha* (A.H.Su. 30/4) [18] where as *Sushruta* has classified it into two groups: namely *Twaka dagdha* and *Mamsa dagdha* (S.Su.12/7) [19]. Acharya *Kashyapa* and *Bhadra Shounaka* have contraindicated Agnikarma for any other *dhatu*, except for *Twaka* and *Mamsa* [20].

Heat generated by different materials:

There are different types of *shalakas*. Furthermore, it is advocated that the average length of probe should be 12 *angula* (ancient Indian units) and the tip should be 2 *anguli* [21] [one

anguli is the width of three fingers approximately by a person of average built in India]. **Table 2:** Types of *Shalakas* and their corresponding temperatures when red hot [22].

How to perform Agnikarma onsite?

For *Shirorog* (headache, migraine, trachoma etc.), the rod should be gently placed between the eyebrows, with high spatial-resolution if possible, on the frontal region. In case of a disease related to the eye lids (*Entropion*), the rod should be placed at the roots of the eye lashes. For pain & *Vataja* disease, such as heal pain, calcaneal spur, *Sandhitgat vata*, *Ama vata*, frozen shoulder, sciatica and cervical spondylosis, the rod should be placed at the site of maximum tenderness. In incomplete inguinal hernia, the rod should be placed on the great toe opposite to the side of hernia /at the superficial inguinal ring. In the case of cyst, mass, warts, tumor, piles, fistula or bleeding disorders, heat should be applied at the bed of the wound after excision is performed. Application on soft parts of the body should be avoided and the site of disease should be [diagnosed] clearly before treatment.

Signs and Symptoms produced after Agni Karma according to Dhatus selected [23-26]

There are four types of *Dagdha* noticed 1) *Twaka Dagdha*: When the *Twaka* is cauterised, burning described as a crackling sound, bad odour and contraction of the skin. 2) *Mamsa Dagdha*: When *Mamsa* is cauterised, there is a pigeon-like discolouration of the part, inflammation, mild pain and the lesion gets dried up and shriveled, 3) *Sira Snayu Dagdha*: When the *Snayu* and *Siras* are cauterised, it leads to black discolouration, swelling of the lesion and a cessation of discharge (including that of blood) and 4) *Sandhi and Asthi Dagdha*: When *Asthi* and the *Sandhis* are cauterised, there is dryness, redness, hardness and fixity of the lesion.

Suitable Season for Agni Karma

Agni Karma can be performed during all seasons except *Grishma* and *Sharada*. Even in these two Seasons, in the case of an emergency, it may be performed after taking appropriate precautions, which are mentioned in the text by *Sushruta* [27]. In *Sharada*, there is mention of *PittaPrakopa*; as Agni Karma also aggravates *Pitta*, it may lead to *PittaPrakopa* if carried out in

Table 2: Temperature in ancient units *kuksya* converted to Celsius.

Types of shalakas	Temperatures
Gold	62 °C
Silver	350 °C
Copper	212 °C
Iron	228 °C
Pippali	57 °C
Aja sakrit	45-55 °C

Agni Karma as a Therapeutic Measure:

Table 3: A number of diseases and conditions have been explained in ancient texts where Agnikarma can be used as therapeutic measure.

Sr.No	Disease	Ch	Su	A.S.	A.H.	B.P	Y.R	G.N	Sha
1	Shiroroga	-	+	-	+	-	-	-	-
2	Vataja Shiroroga	-	-	+	-	-	-	-	-
3	Kaphaja Shiroroga	-	-	+	-	-	-	-	-
4	Ardhav bhedaka	+	-	-	-	-	-	-	-
5	Bharu-lalata Vedana	-	-	+	-	-	-	-	-
6	Vartma Roga	-	+	-	-	-	-	-	-
7	Pakshama Kopa	-	+	+	-	-	+	+	-
8	Shlishta Vartma	-	-	+	+	-	-	-	-
9	Bisa Vartma	-	-	+	-	-	-	-	-
10	Alaji	-	-	+	+	-	-	-	-
11	Arbuda	-	-	-	+	-	-	-	-
12	Puyalasa	-	-	-	+	-	-	-	-
13	Abhisyanda	-	-	-	+	-	-	-	-
14	Adhimantha	-	-	+	+	-	-	-	-
15	Lagana	-	-	+	+	+	-	-	-
16	Medaja Osth Roga	-	+	+	+	+	+	+	-
17	Danta Nadi	-	-	+	+	-	-	-	-
18	Krimi Danta	-	+	+	+	-	-	-	-
19	Adhidanta	-	-	+	+	-	+	+	-
20	Sheeta Danta	-	-	+	+	-	-	-	-
21	Danta Vidhradhi	-	-	+	+	-	-	-	-
22	Jalarbuda	-	-	+	+	-	-	-	-
23	Arsha (Vataja-Kaphaja)	-	+	+	+	-	-	-	-
24	Nasa arsha	-	-	+	+	-	-	-	-
25	Karnarsha	-	-	+	+	-	-	-	~
26	Lingarsha	-	-	-	+	-	-	-	-
27	Yonya arsha	-	-	-	+	-	-	-	-
28	Bhagandar	+	+	+	+	+	-	+	+
29	Chippa	-	+	-	-	-	-	-	-
30	Kunakha	-	+	-	-	-	-	-	-
31	Kadara	-	+	+	+	+	+	+	-
32	Balmika	-	+	+	+	+	+	+	-
33	Jatumani	-	+	+	+	+	+	+	-
34	Mashaka	-	+	+	+	+	+	+	-

Table 3: Continue.....

35	Tilakalaka	-	+	+	+	+	+	+	-
36	Charmakila	-	+	+	+	+	+	+	-
37	Prasupti	-	+	-	+	-	-	-	-
38	Visha Chikitsa	+	-	-	-	-	-	-	-
39	Sarpna Damsa	+	+	+	+	-	-	-	-
40	Alarka Visha	-	+	-	+	-	-	-	-
41	Luta Visha	-	-	-	-	-	-	-	-
42	Mushaka Visha	-	-	+	+	-	-	-	-
43	Gridhrasi	+							
44	Vataja shoola in Twaka	-	+	-	-	-	-	-	-
45	Vishwachi	-	-	+	+	-	-	-	-
46	Galaganda	-	+	+	+	-	-	-	-
47	Ganda mala	+	-	+	+	-	-	-	-
48	Apachi	-	+	+	+	+	-	+	-
48	Granthi	+	+	+	+	-	+	-	-
50	Arbuda	+	+	+	+	-	-	-	-
51	Antra Vridhi	-	+	+	+	-	+	-	-
52	Shlipada	-	+	+	+	-	-	-	-
53	Nadivrana	-	+	+	-	-	-	-	-
54	Upadamsa	-	+	-	-	-	-	-	-
55	Gulma	+	-	+	+	+	-	-	-
56	Vishuchika	-	+	+	+	-	-	-	-
57	Alasaka	-	+	-	-	-	-	-	-
58	Vilambika	-	+	-	-	-	-	-	-
59	Sanyasa	+	-	-	-	-	-	-	-
60	Unmada	-	-	-	+	-	-	-	-
61	Yakrita Plihodara	-	-	+	+		-	-	+
62	Shonita- Ati-Pravriti	+	+	+	-	-	-	-	-
63	Sira-Sandhichheda	-	+	+	-	-	-	-	-
64	Visarpa	+	-	-	-	-	-	-	-

Sharad rutu which is a contraindication.

Agni Karma Purva Ahara (Diet before Agni Karma)

Patients need to be fed with a *pichhila diet* [28] before Agni Karma. It should be performed on an empty stomach in case of urolithiasis, fistula-in-ano, abdominal diseases, haemorrhoids and diseases of the oral cavity [28].

Agni Karma Purva Parikshna (Assessment) [29,30]

Before going into any surgical or para surgical procedure, complete assessment should be carried out. Before Agni Karma is performed, a thorough examination of patient should be carried out and factors such as the shape of the lesion, disease and season should be noted down.

Poorva karma protocols:

First and foremost the patients consent to undergo Agnikarma treatment is mandatory, even though this does not come under mainstream medicine. Next, blood should be monitored routinely; Complete Blood Count and Blood Sugar needs to be carried out. In some cases to prevent conditions such as tetany post burn, Tetanus Toxoid -Intramuscular can be injected. Next the affected region should be clearly diagnosed. The patient should be notified about the the procedure in detail.

Patient should also be informed about the post burn pain, so that he/she will co operate and prepare himself / herself for the procedure with positive frame of mind, and shall not interrupt during therapy. Next the the selected site is cleaned with '*Triphala kwatha*' or 'normal saline'. Routinely, the operative site is cleansed with *spirit* while giving injection or during dressing of wound. Finally, the area is covered with sterile drape.

Pradhan Karma:

There are two types of 'Agni Karma' techniques; one of them is continous heat burns and the other is intermittent heat burns. Superficial burns (i.e "*Twaka Dagda*") are practiced on diseases present superficially and deep heat burns (i.e. *Mamsa Dagda*)



Figure 2: Intermittent, multiple heat burns using the bindu method

are performed for deep seated diseases. Depending on the nature of the disease, the predominance of *doshas* and its site, 10-12 heat burns procedures are carried out with appropriate shalakas.

Agni Karma Paschatkarma:

Yashti madhu ghrita, *Rakta chandan siddha ghrita*, *Ghritkumari majja* or *lepa of ghrita* mixed with honey can be applied prior to dressing the wound caused by heat burn. After heat burn, the post burn scars are left behind which need proper wound care. The topical application of *Yashti madhu ghrita* ointment helps reduce the burning sensation and pain caused by the heat burns; they also aid with the healing process. The site of Agni Karma should be water-proofed to prevent wound infection. *Sukshma triphala vati* or *Triphala guggul* supplements are advised. Anti-inflammatory, analgesics and antibiotics may also be used if required [move to beginning of sentence depending of the severity of the wound. For chronic conditions, 3- 4 doses of Agni Karma should be implemented with an interval of 15 days for two-three months.

Contra-indications for Agni Karma:

Agni Karma should not be carried out for the following conditions: *Pitta Prakriti*, *Bhinna Kostha*, *Durbalya*, *Vridha*, *Antah Shonita*, *Anuddhrata Shalya*, *Bala*, *Bhiru*, a person afflicted with a large number of *Vrana* and a person who is forbidden for *Swedana*. *Swedana* is contraindicated for suffering from: *Pandu*, *Atisara*, *Guda Bhramsa*, *Udara Roga*, *Nasta Sangya*, *Chhardi*, *Shonhita*, *person under influence of alcohol*, *Vidagdha Rakta Pitta*, *Sthula*, *Ajirna*, *Kruddha*, *Trishna*, *Adhya Rogi*, *Garbhini*, *Prameha*, *Ruksha*, *Daurbalya*, *Shranta*, *Visha*, *Kshudha*, *Timir*, *Kshata* and *Oja Kshaya*. According to *Charaka*, Agni Karma should not be carried out in the *Vrana of Snayu*, *Marma*, *Netra*, *Kushtha* and *Vrana with Visha and Shalya*.

Traditional Knowledge of Agni Karma upgraded and used in Modern Therapeutic Protocols [31]

There are two procedures similar to Agni Karma available in modern science, which possibly evolved from Traditional Knowledge. They are Electrocautery and Diathermy.



Figure 3: Traditionally used continuous heating method.

Electrocautery is one of the most useful instruments for surgical procedures. It consists of a platinum wire which can be heated to red hot by means of an electric current. Application of the red hot wire to tissues will either cut them or seal any bleeding points by coagulation. It is ideal for removing small skin tags and papilloma and for controlling bleeding. Conventional electrocauteries used a standard battery with a rheostat to control the temperature of the tip. Subsequently, with the change in domestic electricity supplies from D.C. to A.C, it was possible to use step-down transformers and rheostats; avoiding flat batteries. Most recently, with the introduction of nickel cadmium, rechargeable batteries with the ability to withstand high current, drain without damage, smooth thermal delivery is obtained. A variety of different shaped platinum tips are produced for different applications. Diathermy on the other hand is a bi-polar apparatus that can be used in almost all of the operative procedures. A very high frequency current is passed through the patient's body and heat is generated. Three types of diathermy are available: 1) Medicinal diathermy: It is mild degree and does not cause destruction of tissues, 2) Short wave diathermy: There is an elevation of temperature in the tissue by means of an oscillating electric current with an extremely high frequency (10-100 million cycles/seconds) and a short wave length of 3-30 meters and 3) Surgical diathermy: In this diathermy, a very high frequency current is passed through the patient's body and heat is generated. While one electrode is relatively larger and is strapped firmly to one limb, the other electrode has a pointed, moveable tip; this allows sufficient heat to be generated at the tip to coagulate or cut the tissue. The effect is localized because the current from the movable electrode spreads out throughout the patient's body, and travels to the larger electrode placed in contact with the patient's body.

The advantages of this technique include 1) Absence of bleeding and 2) Its effect is very similar to that of the electrocautery, and the heat generated automatically sterilizes the area treated. However, the main disadvantage is that current is likely to cause ventricular fibrillation and can prove fatal to the patients. Besides the above-mentioned types of cautery, there are other types of cautery that includes 1) Galvano Cautery, 2) Paquelin's Thermo Cautery, 3. Sotore's Cautery, 4) Chemical Cautery, 5) Solary Cautery, 6) Potential Cautery, 7) Cold Cautery, and 8) Sun Cautery. Each of these Cauteries has its own limitations and peculiarity in use.

Effect of Agnikarma

i. Effect on Metabolism:

Our hypothesis is that the site where heat burns are carried out improves the local tissue metabolism; therefore, various metabolic and rejuvenating changes take place at the site of heat burns. Consequently, this leads to an increased demand of oxygen and nutrients for the tissues at the site of heat burn. It also excretes the unwanted metabolites and toxins.

ii. Effect on the blood circulation:

After performing *Dahan*, the superficial, sensory nerves get stimulated. This leads to dilatation of local blood vessels, resulting in an increased blood circulation. Apart from this, it also decreases the viscosity of blood and thus leads to decreased blood pressure

iii. Effect on pain:

Due to increased local metabolism, the waste products (metabolites), which are produced, and thrown out. This normalizes the blood circulation, resulting in the

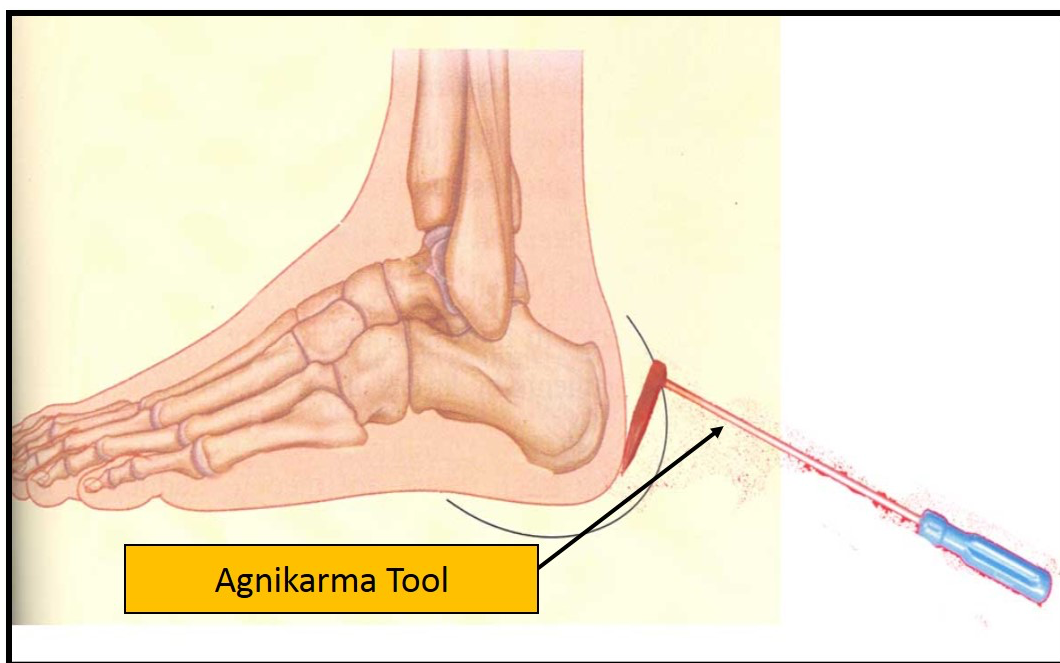


Figure 4: Agnikarma Tool and Desired Site of Agnikarma in Calcaneal spur/ Heel pain

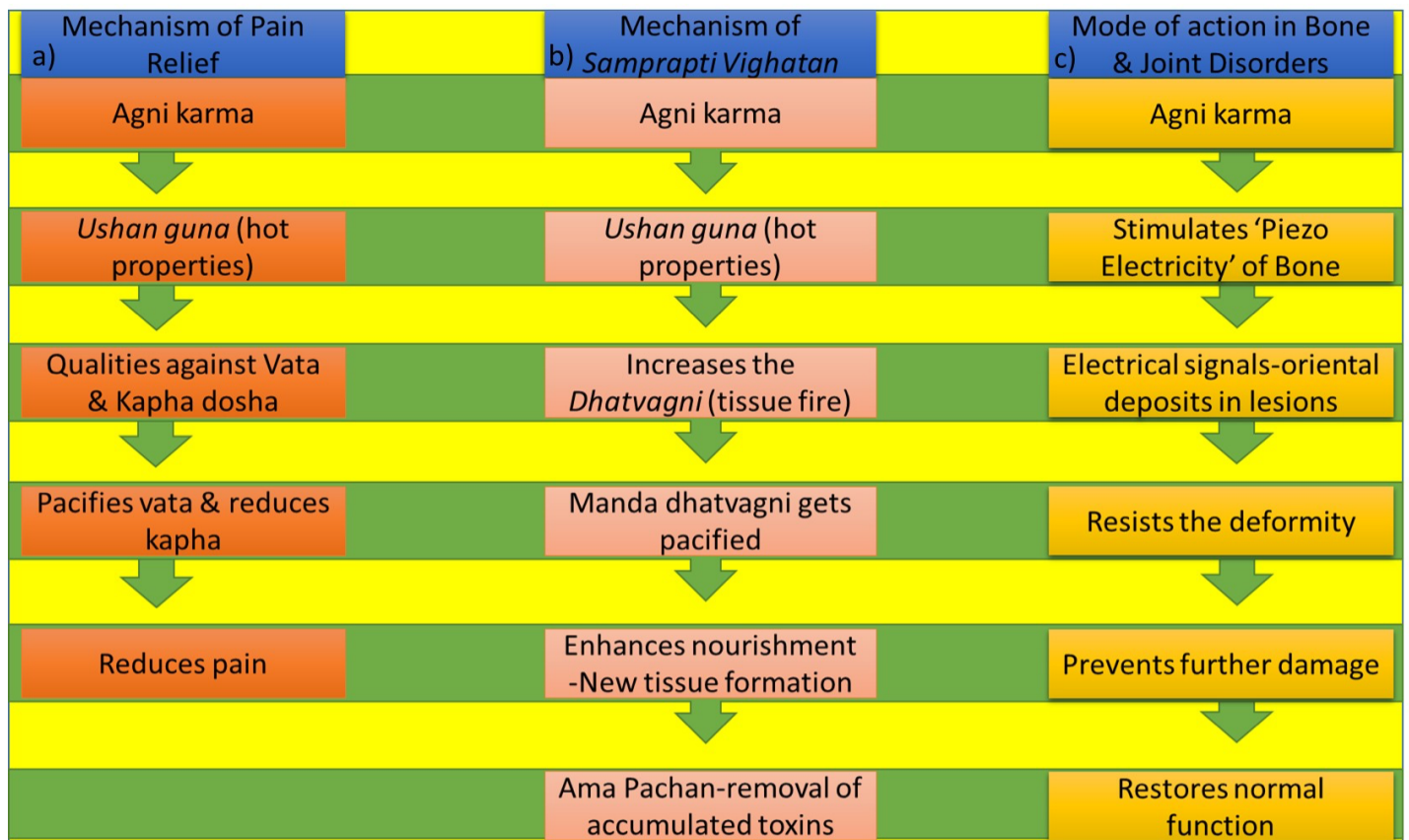


Figure 5: Schematic overview of the mechanism of pain relief: a) Mechanism of pain relief, b) Mechanism of *Samprapti Vighatan* and c) Mode of action in bone & joint disorders.

reduction of pain intensity.

iv. *Effect of heat on nerves:*

It reduces the excitability (quick response to stimuli) of nerves.

v. *Effect of heat on body temperature:*

Heating affects the vasomotor centers causing a general rise in temperature. Some patients experience severe pain after heat burn therapy, but it subsides on its own in due course of time.

vi. Agnikarma removes srotasavarodh, improves local blood circulation and neutralizes Sheeta, Chala, Khara and Ruksha Guna of Vyana Vata [2].

consideration the linguistic and historic-time barriers into the equation. Once these base-axioms are understood, even modern scientist and doctors can upgrade their knowledge about Ayurveda fundamentals several-fold to benefit all humanity. Because of its potential value to humanity, the authors hope that modern scientists and doctors who practice modern medicine with a reductionist approach may come to appreciate the wholesome approach involved in this treatment modality. Overall, this paper serves as the first comprehensive reference manual for Ayurvedic Physicians and integrated medical practitioners who are interested in applying Agnikarma Treatment.

Conclusion

Ancient treatment modalities cannot be merely understood by viewing the results and understanding the underlying mechanisms through a modern science window. Reductionism may possibly end up in arriving at shortsighted conclusions that this time-tested treatment modality is ineffective. Rather, the underlying mechanisms such as the Agnikarma can only be understood and appreciated once the fundamental axioms involved in Ayurveda are clearly demystified, taking into

Golssary

Agnikarma= Therapeutic Heat Burn

Agni= Heat / Fire

Karma= Action / Procedure

Dahan karama= Heat Burn

Krimi Chikitsa= Micro organism treatment

Bheshaja= Medicine

Yadnya= Religious procedure in which herbal/ plant barks are burnt

Shastrakarma = Surgical operation

Ksharakarma= Ayurvedic Caustic medicine

Trasana Chikitsa= Shock treatment

Sanyas= Comatose condition

Mangsat Vyadhi= Muscular Diseases
 Agropaharaniya= Pre operative preparation
 Anushalya= Para Surgical
 Vidhi= Procedure
 60 Upakrama= 60 measures/ ways
 Asthi, Snayu, Sandhigata Vataprakopa= Vata aggravation in Bone, Ligaments, Joints
 Dahnopakarana= Instruments used in Heat burn therapy
 Pippali= Piper Logum
 Aja Shakrida= Dried Goat dunk
 Godant= Cow's teeth
 Shara= Tip of metal arrow
 Shalaka= Iron rod
 Jambavashtha= Probe with round tip
 Kshaudra= Honey
 Madhuchhista= Honey wax
 Sneha= Oil base
 Lauha= Iron
 Ghrit= Clarified butter
 Tail= Oit
 Vasa= Fats
 Majja= Bone marrow
 Yashtimadhu= Glycyrrhiza glabra plant
 Suchi= Needle
 Hem= Gold
 Rajat= Silver
 Tamra= Copper
 Kansya= Copper alloy
 Varti= Wicks
 Suryakant= Gems
 Ardhendu Vaktra Shalaka= Spoon shaped probe
 Kalasthidal Tulya Shalaka= leaf shaped probe
 Twakadagdha= Superficial Skin burn
 Mamsadagdha= Muscle burn
 Sira, Snayu, Sandhi and Asthidagdha: Deep burn to Vessels, Ligaments-Tendons, Bone, Joints
 Arsha= Hemorrhoids
 Bhagandara= Fistula
 Granthi= Cyst
 Nadivrana= Sinus
 Khair= Acacia Catechu plant
 Badar= Zizyphus fruit
 Nirdhoom= Smoke free
 Pancha dhatu= Probe made of 5 Metals (Gold, Silver, Copper, Iron, Zinc)
 Dravya= Material
 Akriti= Shape
 Snigdha= Oil base/ Wet
 Ruksha= Dry
 Sthanika= Local
 Vicharchika= Eczema / Skin diseases
 Shnanantariya= Distal to the site of disease
 Visuchika= Diarrhea
 Apachi= Lymphadenopathy
 Kandara= Tendon
 Krimidanta= Dental carries
 Shalaka
 Valaya= Circular ring shape
 Bindu= Circular disk shape
 Vilekha= Horizontal line shape
 Pratisarana= Rubbing the site
 Ardhchandra= Crescent shape
 Swastika= Specific shape of a Swastika Yantra
 Astapada= It contains eight limbs in different directions
 Dhatu= Metal
 Shalaka= Probe
 Angula= ancient Indian units (Approximately 2

cm.)
 Shiro rog= Diseases of head
 Sandhitgat vata= Osteo arthritis
 Ama vata= Rheumatoid arthritis
 Su.= Sushruta
 Cha.= Charak
 A.S.=Ashtang Sangrah
 A.H.= Ashtang Hriday
 B.P.= Bhavprakash
 Y.R.= Yog Ratnakar
 G.N.= Gan nath Sen
 Sha.= Sharangdhar
 Shiro roga= Diseases of head
 Vataj Shiro rog= Transient severe headache
 Kaphaja Shiro rog= Dull persistent headache
 Ardhav bhedak= Migraine
 Bharu-lalata Vedana= Frontal headache
 Vartma Roga= Diseases of Eye lids
 Pakshama Kopa= Entropion
 Shlishta Vartma= Sticky eyelids
 Bisa Vartma= Follicular eyelids
 Alaji= Cyst
 Arbuda= Tumour
 Puyalasa= Dacrocystitis
 Abhisyaanda= Conjunctivitis
 Adhimantha= Trachoma
 Lagana= Sty / chalazion
 Medaja Osth Roga= Lip hyperplasia
 Danta Nadi= Dental root sinus
 Krimi Danta= Dental carries
 Adhidanta= Extra teeth
 Sheeta Danta= Hypersensitivity of teeth
 Danta Vidhradhi= Dental abscess
 Jalarbuda= Cyst
 Nasa arsha= Nasal polyp
 Karnarsha= Polyp in ear
 Lingarsha= Veneral warts
 Yonya arsha= Veneral warts
 Chippa= Nail bed infection
 Kunakha= Paronychia
 Kadara= Corn
 Balmika= Actinomycosis
 Jatumani= warts
 Mashaka= Abnormal swelling
 Tilakalaka= Nevus
 Charmakila= Pedunculated growth
 Prasupti= Numbness
 Visha Chikitsa= Poison treatment
 Sarpna Damsa= Snake bite
 Alarka Visha= Organic poison
 Luta Visha= Lizard bite
 Mushaka Visha= Rat bite
 Gridhrasi= Sciatica
 Vataja shoala in Twaka= Cutaneous transient pain
 Vishwachi= Frozen shoulder
 Galaganda= Cervical lymph node
 Ganda mala= Lymphadenitis
 Antra Vridhi= Internal abscess
 Shlipada= Elephantiasis / Filariasis
 Nadivrana= Sinus
 Upadamsa= Sting bites
 Gulma= Fibroid
 Vishuchika= Dysentery
 Alasaka= Bowel dysfunction
 Vilambika= Delayed evacuation
 Sanyasa= Comatose condition
 Unmada= Schizophrenia
 Yakrita Plihodara= Acitis with Hepato Spleno

megaly
 Shonita- Ati-Pravriti= Excessive bleeding
 Visarpa= Erysipelas (Abscess)
 Grishma= Summer season
 Sharad= 2 months Period after rainy season
 Pitta prakop= Aggravation of Pitta
 Pichhila diet= Semi solid oily diet
 Triphala kwath= Herbal decoction (mixture of 3 plants- Emblica officinalis, Terminalia bellirica and Terminalia chebula)
 Ghrita= Clarified butter
 Yashti madhu ghrita= Clarified butter medicated with Glycyrrhiza glabra herb
 Rakta chandan siddha ghrita= Clarified butter medicated with Pterocarpus santalinus herb
 Ghrithkumari majja= Pulp of Aloe vera
 Sukshma triphala vati / Triphala guggul= Ayurvedic preparatory medicines
 Pitta Prakruti= A person with Pitta constituent
 Bhinna Kosta= Gastric / Intestinal ulcer (perforation)
 Durbalya= Weak constituent
 Vriddha= Old age
 Antah Shonita= Internal hemorrhage
 Anuddhrata Shalya= Embedded foreign body
 Bala= Child age
 Bhiru= Caward
 Vrana= Wounded person
 Swedana= fomentation
 Pandu= Blood borne disease/ Anemia
 Atisara= Loose motion
 Guda Bhramsa= Rectal prolapse
 Udara Roga= Ascitis
 Nasta Sangya= Smell dysfunction
 Chhardi= Vomiting
 Shonhita= Hematemesis
 Vidagdha Rakta Pitta= Purpura / urticaria
 Sthula= Obesity
 Ajirna= Indigestion
 Krudhdha= Hunger
 Trishna= Thirst
 Adhya Rogi= Rich patient
 Garbhini= Pregnant
 Prameha= Diabetes
 Ruksha= Dried
 Daurbalya= Weakness
 Shranta= Exhausted
 Visha= Poison
 Timir= Blurred vision
 Kshata= Wounded
 Oja Kshaya= Immuno compromised person
 Vrana of Snayu, Marma, Netra, Kushtha = Ulcerative lesion in Tendon, Visceral organs, Eye, Leprosy
 Shalya= Foreign body
 Samprapti vighnan= Correcting / Pacifying the pathogenesis

References

1. Aignanaa kRtvaa yat\ kma , Agnao: sMabainQa vaa yat\ kma-tdignakma - I'sau.saU/1, 2 - Dalhan Commentry.
2. A. Dwivedi, Ayurveda, 2014
3. Atharvaveda- Krimi Chikitsa-5/5/23-13
4. Atharvaveda- Bhesaja -6/11/6
5. Rigaveda- Bhesaja-Aignaihma-syaBaoYajama\ È -yajau-23 /10
6. Rigaveda-Yagnya-savao-YaaMcaikO`maINa Mdhyamaig nana mauKama \È - Aqava-5 /23.
7. Supremacy of Agnikarma - xaaradignaga-rIyaana\ iËyaasau vyaa#yaat: t_gQaanaaM raogaaNaamapunaBaa-vaat \BaoYajaSas~xaarOrsaaQyaanaaMt%saaQya%vaacca È(sau.sau. 12À3). syaBaoYajama\ È -yajau.23 /10
8. Charaka Samhita - Sutrashtana- Trasana Chikista'Ch.Su 24/46
9. Charaka Samhita - Sutrashtana- Mansagata Vyadhi'. Ch.Su. 28/26.
10. Sushruta Samhita -Sutrashtana- Agropaharaniya -5/6.
11. Sushruta Samhita -Sutrashtana - 'Anushalya.'8/15.
12. Sushruta Samhita -Sutrashtana- 12/9-10.
13. Sushruta Samhita - Chikitsasthana- pakrama-1/8.
14. Sushruta Samhita - Chikitsasthana- Asthi, Snayu, Sandhigata Vataprakopa- 4/8.
15. Dalhana Commentary on Sushruta's Sushrut samahita-Chapter 12/ 11
16. AcharyaVagbhata -A.H. Su. 30/4
17. Sushruta - S. Su. 12/7
18. Shalakas. Probe should be 12 angula (ancient Indian units) and the tip should be 2 anguli.
18. Types of shalakas and their corresponding temperatures
20. ta~ Sabdpa`aduBaa-vaao duga-MnQata %va@saMkaaocaSca %vagdgQao , kpaotvaNa-ta|lpaEvayaqaauvaodanaa SauYksaMkuicavta`Nata ca maaMsadgQao .
21. kRYNaaonnatva`Nataa s`aavasainnraoQasca isarasnaayaudgQao, ÈxaaÈNata kk
22. Saisqar va`Nata ca saMqyaaisQadgQao È sau.saU .12À8`
23. pa@vajambaivaaisataM sannaM samyagdgQama\ È A.saU. 30À6`
- 24 Sushruta- Su. Su. 12/4.
25. pichhila diet -S. Su. 12/5
26. Purva Parikshna -raogasya saMsqaanamavaoxyaM samyak`nnarsya mamaa-iNa balaabalaM ca È.
27. vyaa iQa tqatu-M ca samaIxya samyk\ ttao | QyavasyoaidiBaYgaaignkma-ÈÈ `sau.saU. 12À12`.
28. P. Lakshmanan, S. Lakshmanan, "Protecting Traditional Knowledge, Can Intellectual Property rights help?, Ancient Science, 1, 2, 2014.
29. Sushruta. Varanasi: Chaukhambha Visvabharati; Sushruta samhitha with English translation of text and Dalhana's commentary along with critical notes edited and translated by Priyavrat Sharma.Vol; Reprint, 2004.
- 30.Charaka. Varanasi: Chowkambha Sanskrit Series Office; Agnivesha's Charaka Samhita. Text with English translation. Translated by Ramkaran Sharma and Vaidya Bhagwan Dash. 1, 2005.
- 31.Cakrapanidatta. 2nd ed. Varanasi: Chowkambha Publishers; Cakradatta- (Sanskrit text English translation) Edited and translated by Priyavrat Sharma, 1998.

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