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Review Article

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CONCEPTUAL REVIEW OF AGNIKARMA IN MANAGEMENT OF KADRA

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ABSTRACT

In Ayurveda, Agnikarma refers to application of heat on the affected part. Kadar (Corn) is the hard thickening, hyperkeratosis of skin in sole, palm due to constant pressure and repeated minor trauma. Kadar (corn) is initially painless in condition but with its progress, it may become painful. In modern science, corn is being treated by using anti-inflammatory drugs, corn cap, salicylic acid and excision. Even today there is no satisfactory and permanent treatment available for corn because of its high recurrence tendency. According to Ayurveda, Kadar can be correlated with the condition of corn. Aacharya Sushrut has advised Agnikarma for Kadar. In the present article we are

discussing regarding the role of agnikarma in threptic management of corn.

INTRODUCTION

Ayurveda is a treasure of researches done by our Aacharyas. It is a system of ancient Indian Medicine, which is based on theory postulating man as a replica of Universe. Ayurveda explained the ideal way of living, which promises a disease free, happy and long life. These are the two main aims of Ayurveda. Ayurveda had not only provided a wide range of drugs and karmas for treating various diseases but also provided preventive measures for healthy one.

The *Shalyatantra* a prime branch is rich in many aspects of modern surgical concepts. *Kadar* is one of such kind of disease, which give more trouble for patient & intervenes with routine work. *Acharya Shushruta* describes '*Kadar*' under "*Kshudra-roga*". *Acharya Bhoj* also

describes this disease. Acharya Sushruta is described its clinical features as. Keelavat (lesion have a central core) *kathin* (hard), granthi (knotted), *Madhyo Nimna* (depressed in the central) or *Unnat* (elevated in the central) *Kolamatra* (seed of plum) in size, painful and sometimes with Srava (discharge). It is a plaque of hyperkeratosis caused by repeated friction or pressure. It is assumed that frictional forces induce hyperkeratosis leading to thickening of stratum corneum of the skin over certain areas prone to mechanical stresses. If these frictional forces are distributed over a broader area, a callus occurs. In a callus, there is epidermal hyperplasia. The stratum corneum is thickened and compacted, sometimes with parakeratosis over the dermal papillae leading to expansion of the granular layer. The underlying dermis may show an increase in dermal collagen and fibrosis around the neurovascular bundles. In modern sciences it can be compare with corn. A Corn is a specially-shaped callus of dead skin that occurs on thin or glabrous surface of toe. Repeated injuries and friction to sole cause the corn. It is a localized hyperkeratosis of the skin. Usually occurs at pressure sites such as on the soles and toes, occurring due to defective foot wear, thorn prick, etc. There is usually a horny induration of the cuticle with a hard centre. Corn has tendency to recur after excision. It has a deep central core which reaches to the deeper layers of dermis.

Modern science has provided some preventive measures such as soft shoes or soft pads at pressure point of the sole, application of salicylic acid on corn, use of central local application such as cornac or carnation cap and lastly excision of corn. There is no satisfactory and permanent treatment available for corn and have its high recurrence tendency.^[7]

The incidence of corns on the feet has been reported to be ranging anywhere from 14% to 48%. [8] Individuals with darkly pigmented skin are more prone to developing corns. They have been reported to affect older age groups with a slight female predominance due to wearing narrow shoes. The elderly are also subject to loss of the protective fat pad cushioning, called fat pad atrophy, which can increase the incidence of painful corn. India reports more than 10 million cases of foot corn every year. The management of foot corn is by using corn caps which leads to the destruction of the tissues or by surgical excision local anaesthesia. [9] As per Ayurvedic concept, *Kadara* may develop as the vitiation of *Vata* with *Kapha* Dosha. *Vata and Kapha Dosha* have been considered as the important factors for causation of *Shotha* (inflammation) and *Shoola* (pain) [10] Sushruta had mentioned four type treatment viz. *Bheshaja, Ksharkarma, Agnikarma and Shastrakarma*. [11]

AIM AND OBJECTIVES

- 1. To evaluate the efficacy of Agnikarma in the management of *Kadar*.
- 2. To review and analyze available literature of *Kadar* and its treatment w.s.r. to Corn.

Historical review of agnikarma

In Atharvaveda, Agni is accepted as God and Bheshaja in the reference of Krimi (Ath. 5/23/1,3,5). In Rigveda (10/162/1-4) reference of Agnikarma Chikitsa is available in the context of obstetric disease. In Yajurveda (23/10/1), while describing treatment of Sheeta, Agni chikitsa is mentioned. In Samaveda, a chapter known as Agneyakanda proves the importance of Agni. Acharaya Sushruta told Agnikarma as a Parasurgical procedure and it is superior to all procedures. In Sushruta Sutrasthana in the context of Agropaharaniya, Yantravidhi Adhyaya as an Upayantra, Anushastra etc. In Charaka Samhita Sutrasthana in Vidhishonita Adhyaya and in Vividhashitapitiya Adhyaya in the context of importance of agni can be seen. in the same way Kaphaja Gulma in Gulma Chikitsa adhyaya, Granthi Roga and Bhagandara Chikitsa., Udara Chikitsa in the reference of Pleehodara Roga and Yakritodara Chikitsa. Yogaratnakara has explained Agnikarma regarding the disease Gridhrasi In the context of Vata vyadhi. Sharangadhara, Gadanigraha, Vangasena, Bhavaprakasha also mentioned Agnikarma Chikitsa in the management of various diseases. A. S.Su. chapter 40 and A. H. Su. chapter 30 deals with Agnikarma Vidhi and there are many other references of other diseases regarding Agnikarma.

Review of agnikarma

Utpatti and Nirukti

The word Agnikarma comprises Agni + Karma i.e. Heat + Procedure. "The procedure in which Samyaka Dagdha Vrana is produced by Agni with the help of various dravyas is called as Agnikarma". In simple words, Intentional therapeutic burn is termed as Agnikarma.

"अग्निना कृतं यत कर्म तद अग्निकर्म।"

Synonyms of agni karma

- i)Agni Chikitsa ii) Agni Karma
- Agni Karya Dagdhakarm iii) iv)
- Dahan Karam Dagdha Chikitsa v) vi)

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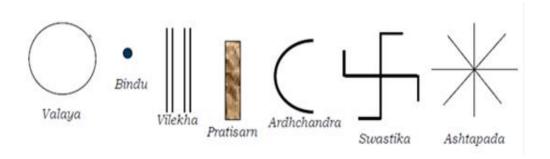
Dahana vishesha

Dahana Vishesha is the figure produced in the skin after Agnikarma Chikitsa.

- 1. Valaya (Circle)
- 2. Bindu (Dot)
- 3. *Vilekha* (Parallel line)
- 4. Pratisarana (Rubbing)

Acharya Sushruta has explanedthese four types in the context of Agnikarma Vidhi Adhyaya, [70] whereas Ashtanga samgrahakara has mentioned three more types of Dahana Vishesha in addition.

- 1. Ardhchandra
- 2. Swastika
- 3. Ashtapada



Classification of agnikarma

Agnikarma is classified as follows:

- 1) According to site,
- a. Sthanika (Local): Kadara, Arsha, Vicharchika
- b. Sthanantariya (Systemic): Apachi, Gridhrasi

2) According to akriti

तत्र वलय-बिन्दु-विलेखा-प्रतिसारनीति दहनविशेषः। ⁷⁰(सु.सु.12/11)

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- 1. Ardhchandra
- 2. Swastika
- 3. Ashtapada

3) According to dravya

तत्र रिनग्धं रुक्षं वाश्रित्य द्रव्यमग्निर्दहति अग्निसंतप्तो हि रनेह सूक्ष्मसिरानुसारित्वात्त्वगादीननुप्रविश्याश्र् दहति तरमात् रनेहदग्धेअधिका रुजा भवन्ति । 71 (सु.सु.12/15)

- a) Ruksha agnikarma: Pippali, Shalaka, Godanta are used for Twak and Mamsa dagdha.
- b) Snigdha agnikarma: Madhu, Ghrita, Taila etc. are used for Agnikarma in Sira, Snayu, Sandhi, Asthi type of Agnikarma.

4) According to dhatu

तत्र द्विविधमग्निकर्माहुरेके—त्वग्दग्धं मांसदग्धंच ,इह तु सिरारनायुसंध्यष्वपि न प्रतिषिध्दोअग्निः ।⁷² (सु.सु.१२/७)

According to Acharya Sushruta and Vagbhata the Agni Karma should be done as per involvement of the Dhatus

such as -

- a. Twakadagdha
- b. Sira and Snayudagdha
- c. Mamsadagdha
- d. Asthi Sandhidagdha

5) According to disease

There are so many types of *Agni Karma* eg.

- 1. In the disease like Arsha, Kandara etc. it should be done after surgical excision.
- 2. In Sinus, fistula in ano etc. it should be done after incision.
- 3. In Krimidanta it should be done after filing the cavity by Jaggery, Madhuchhista etc.

Types of dagdha

तत्र प्लुष्टं दुर्दग्धं सम्यग्दग्धमतिदग्धं चेतिचतुर्विधमग्निदग्धम | ⁷³ (सु.सु.12/16)

According to Sushruta, all Dagdha are included under four types of Dagdha Vrana.

1) Plushta dagdha

Plushta dagdha is that which has a pigmented area on the skin associated with severe burning sensation.

2) Dur dagdha

Durdagdha is that in which *sphota* (blebs, vesicles) appear, accompanied with severe pain such as sucking, burning, redness, paka (exudation or ulceration) and pain, these subsiding after a long time.

3) Samyaka dagdha

Acharya Sushruta mentioned Samanya Lakshana (proper therapeutic wound) produced in any type of *Dhatu* (tissue) and special symptoms are only related to the *Dhatu* concerned.

> Samanya lakshana of samyaka dagdha vrana

- Ana-awagadha Vranata (Wound which is not deep)
- Talphala Varnata (Fruit of Tala tree-blue-black in color)
- Susamshita Vrana (Without elevation or depression)

> Special symptoms of samyaka dagdha related to skin

- Shabdapradurbhav (Production of specific sound)
- Durgandhata (Bad odour)
- Twak Sankocha (Contraction of the skin)

> Special symptoms of samyaka dagdha related to mamsa dhatu

- Kapotvarnata (Color like that of pigeon i.e. ashy/ dark grey)
- Alpa Swayathu (Mild swelling)
- Alpa Vedana (Less pain)
- Shuska Sankuchita Vranata (Dry, contracted wound)

> Special Symptoms and Signs of samyaka dagdha related to sira, Snayu

- Krishna Vranata (Black coloration)
- Unnata Vranata (Elevated)
- *Srava Sannirodha* (Cessation of discharge/ blood)

- > Special Symptoms and Signs of samyaka dagdha related to sandhi, Asthi
- Rukshata (Dryness)
- Arunata (Dark red coloration)
- Karkashata (Roughness)
- Sthirata (Stability)

4) Ati dagdha

अतिदग्धे मांसावलंबनं गात्रविश्लेषे सिरास्नायुसंध्यस्थि व्यापादनमतिमात्रं ज्वरदाहपिपासामुर्च्छाश्रचीपद्रवा भवंति , व्रणश्चास्य चिरेण रोहति, रुढश्च विवर्णो भवति । तदेतच्चतुर्विधमग्निदग्ध लक्षणमात्मकर्मप्रसाधकं भवति । ⁷³ (स्.स्.12/16)

- Mamsa-avalambana (Hanging burnt tissue)
- Gatra-vishlesha (Parts become loose and useless)
- Destruction of Sira, Snayu, Sandhi (Tendons & joints)
- Jwara (Fever)
- Daha (Burning sensation)
- Pipasa (Thirst)
- Murchha (Unconsciousness)
- Wound heals after a long time and healed ulcers have discoloration.

According to modern terminology, *Plushtha* is scorched burn, *Durdagdha* is blistered burn, Samyaka Dagdha is superficial burn which is ideal and Ati Dagdha is deep burn which is excess.

DISCUSSION AND RESULT

- 1) Agni karma said to be the best among Para surgical procedure like Kshar karma because it's said to be ROGANAAM APUNARV BHAVA Diseases which is treated by Agni karma never recure and its destroy diseases from root.
- 2) Diseases which are not treated by Aaushad, shastra, and Kshar can be treated by Agni karma Hence Agni karma said to be the best.
- 3) Fire (thermal cautery) is better than even the alkali, for the diseases burnt by it (treated) do not reccur and it can be used even in (diseases) which have not been successful treated with drugs, alkalies and knife.

Agnikarma pradhanya: (Superiority of thermal cautery)

Agni (fire) is better than alkali in action of burning; because disease treated by Agnikarma do not reoccur and also the disease which are incurable by the use of medicines, sharp

instruments and alkalis can be cured by *Agnikarma*. The surgical excision should be done with the sharp instrument, which is heated by Agni with complete asepsis; otherwise, there will be sepsis by unheated instrument. By these virtues *Agnikarma* is having advantages than other procedures of treatment. Vata & Kapha are mainly responsible Dosha and Dushya Meda and Rakta in the pathogenesis of Kadar. Agnikarma is for local Vata & Kaphaja Vyadhi and diseases treated by Agnikarma do not reoccur. It gives instant pain relief to the patients. There is no fear of complication such as purification and bleeding due to contact with Agni. As only Agnikarma therapy has a property to destroy the pathology in the deeper structure. Even modern science has also mentioned that central core of corn reaches in the deeper layers of dermis and hence Agnikarma is the only therapy which can destroy the hyperkeratosis of skin with the properties of Ushna, Tiksha, Sukshma, Vyavai, Vikasi and Pachana Gunas of Agni & Tila Taila.



Enhance nourishment & formation of newer tissues.

Also perform *Ama Pachana* & removal of accumulated toxins.

Mode of action of agni karma

Vata is a cause for Shool or pain. Agni karma having Ushna and Teeksna Guna which is opposite to Vata and subsides Vata therefore decreases pain, every Dhatu (tissue) has its own Agni called as Dhatvagni which is responsible for nourishment. Ushna Guna of Agni Karma Increase in Dhatvagni, gets rectified and Enhance nourishment, further develop newer tissue.

Agni possesses Ushna, Tikshna, Sukshma and which are opposite to Vata and Kapha properties. Physical heat from red hot Shalaka is transferred as therapeutic heat to Twakdhatu by producing Samyak Dagdha Vrana. From Twakdhatu this therapeutic heat acts in three ways. First, due to Ushna, Tikshna, Sukshma, Ashukari Guna it removes the Srotavarodha, pacifies the vitiated Vata and Kapha Dosha and maintains their equilibrium. Secondly, it

increases the Rasa Rakta Samvahana (blood circulation) to affected site. The excess blood circulation to the affected part flushes away the pain producing substances and patient gets relief from symptoms. Third, therapeutic heat increases the Dhatwagni, so metabolism of Dhatu becomes proper and digests the Amadosha from the affected site and promotes proper nutrition from Purva Dhatu. In this way, Asthi and Majja Dhatu become more stable. Thus, result is precipitated in the form of relief from all symptoms of Kadar. Further it can be endorsed that the therapeutic heat goes to the deeper tissue like Mamsa Dhatu and neutralizes the Sheeta Guna of Vata and Kapha Dosha and in this way vitiated Doshas come to the phase of equilibrium and patients got relief from the symptoms.

Indication of agnikarma

Vatakanṭaka, Shiroroga, Ardhavabhedaka, VratmaRoga, Pakshmakopa, ShlistaVratma, Vishavratma, Alaji, Arbuda, Puyalasa, Abhiṣyanda, Adhimantha, LaganaMedoj Oshtharoga, DantaNadi, Krimidanta, Adhidanta, Shitadanta, Dantavruddhi, Jalarbuda, Arsha, NasaArsha Karnarsha, Lingarsha, Yoniarsha, Bhagandara, ChipaKunakha, Kadara, Valmika, Jatumani, Mashaka, Tilakalaka, Charmakilai,VatajashulaVishwachi, Galagand, Gandamala, Apachi, Granti, Antravruddhi, Shlipada, Nadivrana, Upadvansha, Gulma, Vilambika, Sanyasa, Unmada, Yakruta & Plihodara, Shonita Atipravrutti, Shira Sandhi Cheda, Visarpa.

> Contraindications of agnikarma

1) Pitta Prakriti 2) Bhinna Kostha

3) Daurbalya 4) Vriddha

5) Antah Shonita 6) Anuddhrata Shalya

7) Bala8) Bhiru9) Multiple Vrana10) Balaka

11) Those, in whom *Swedana* (Sudation) therapy is contraindicated.

Agni (fire) is better than alkali in action of burning; because disease treated by *Agnikarma* do not reoccur and also the disease which are incurable by the use of medicines, sharp instruments and alkalis can be cured by *Agnikarma*. The surgical excision should be done with the sharp instrument, which is heated by Agni with complete asepsis; otherwise, there will be sepsis by unheated instrument. By these virtues *Agnikarma* is having advantages than other procedures of treatment. Vata & Kapha are mainly responsible Dosha and Dushya Meda and Rakta in the pathogenesis of Kadar. Agnikarma is for local Vata & Kaphaja Vyadhi and diseases treated by Agnikarma do not reoccur. It gives instant pain relief to the

patients. There is no fear of complication such as purification and bleeding due to contact with Agni. As only Agnikarma therapy has a property to destroy the pathology in the deeper structure. Even modern science has also mentioned that central core of corn reaches in the deeper layers of dermis and hence Agnikarma is the only therapy which can destroy the hyperkeratosis of skin with the properties of Ushna, Tiksha, Sukshma, Vyavai, Vikasi and Pachana Gunas of Agni.

CONCLUSION

The ancient science of Ayurveda is meant to maintain the equilibrium of health and to protect the life from several diseases. For this purpose, certain rules for proper lifestyle are explained in it. But in the present era, due to several causes that kind of lifestyle is not going to be followed by mankind which leads to many life-threatening problems. Kadar is one of them. Kadar (corn) can be re-occurred if its only surgical excision done.

- Agnikarma therapy is more suitable in the management of corn. Agnikarma is superior for local Vata & Kaphaja Vyadhi because it gives instant relief to the patients and diseases treated by Agnikarma do not reoccur.
- 2) Instead of surgical excision, Agnikarma therapy is more satisfactory in the management of corn. It has no side effects, complications & recurrence. 3) It enables the patient to do his or her daily routine activities within a few minutes of Agnikarma procedure. 4) The therapy is cost effective as compared to surgical excision with respect to, number of post excision dressing, Antibiotic, Analgesic and Anti-inflammatory and wound healing promoting drugs.

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