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ABSTRACT

Agnikarma is the oldest known and popular modality of treatment.BeingUpayantra&Anushastra, it is been considered as the superior treatment among Bheshaja,shastra and kshara since the disease intervened by agnikarma does not reccur. For agnikarma procedure, various materials i e, Agnikarma dravyas,its indications, contra indications, symptoms of Samyakdagdha, Atiand Heenadagdha and also its treatments have been mentioned in agnikarma VidhiAdyaya in Sushrutha Samhitha. In contemporary Science, Agnikarma has been enumerated in different forms such as diathermy, infrared radiation, laser therapy, photo therapy, ultrasound therapy, low frequency current and transcutaneous electric nerve stimulation. In present days Agnikarma is most commonly used in most of the painful disorders to relieve pain. Hence this article make a review over ancient views and also the newer inventions of cauterization which can be used accordingly in conditions where Agnikarma is needed.

KEYWORDS: *Agnikarma*, Cauterization.

INTRODUCTION

The Agnikarma (Thermal Cautery) involves a procedure whereby heat is transferred to the affected parts of the body using a metal Shalaka (metal rod). Agnikarma in Light of Veda. In Rig-veda application of Agni has been mentioned in context to obstetric and gynecological disorders. The gap thus formed is filled by the proliferation of bone resulting in formation of a bony spur to secure the detached attachment. The verses indicate application of Agnikarma in order to get rid of microorganisms in vagina and uterus of the women to save the fetus from getting infected. Yajur-veda has symbolized Agni and its purpose in sheeta (cold) and related disorders Samavedaenumerated Agni in a separate chapter as Agneya-Kanda where an elaborate description to Agni is mentioned. Atharva-veda identified and worshipped Agni as a God.^[1] Therapeutic burns are

created using these metal rods, based on the specialized knowledge in a number of areas including the kind of disorder, the constitution of the patient, severity of the disorder, etc.

Cauterization is a medical practice or technique of burning a part of a body to remove or close off a part of it. It destroys some tissue in an attempt to mitigate bleeding and damage, remove an undesired growth, or minimize other potential medical harm, such as infections when antibiotics are unavailable.

Importance of Agnikarma

The disease managed by *Agnikarma* never reoccurs. The disease which could not be managed by medicines, surgery or *Kshara*, can successfully be managed by this procedure.^[2]

Dahana Vishesha^[3]

Sl. No.	Equipment	Where it use
01	Pippali, Ajashakrit, Godanta, Shara, Shalaka	Twak gata
02	Jambvousta Shalaka,	Mamsa gata
03	Madhu, Guda, Taila and Grithaetc	For diseases of Sira, Snayu, Sandhiand Snayu



Classification

1. It is of two types.

i) Twak Dagdha and ii) Mamsa dagdha.^[4]

2. According to shape.^[5]

i) *Valaya*: circular; ii) *Bindu*: shape of dot; iii) *Vilekha*: Transverse/ vertical/ angular iv) *Prathisarana*: Scraping manner

3. Acc to *Vagbhata* he includes.^[6]

i) Ardhachandra; ii) Swastika; iii) Astapada

4. According to involvement of structures.^[7]

i) Twak ii) Mamsa, iii) Sira iv) Snayu, v) Asthi; vi) Sandhi

5. Dravyabheda^[8]

Snigdha Agnikarma -Madhu, Gritha, Taila used in Sira, Snayu, Sandhi Ruksha Agnikarma -Pippali, Shalaka, Godantha used in Twak, Mamsa

6. Staana Bheda

Sthanika-In diseases like Kadara, Arshas, Vicharchika Sthananthareeya- In diseases like Apaci, Gridrasi

Indications of Agnikarma

Angaglani, Adhimantha, Charma Keela in these conditions twak daha.^[9]

Arshas, Bhagandara, Granthi, Nadivrana Dushtavrana in these conditions Mamsa Daha.^[10]

Slishtavartma, Asrksrava, Neelika, Asamyak Vyadha in these conditions Sira, Snayu, Asthi and Sandhi Daha to be done.^[11]

Condition such as presence of very severe pain in skin, muscle, veins, ligaments, bones, joints and bony joints caused by vata, muscle which are grown upwards, hard and without sensation, ulcers, tumors, hemorrhoids, malignant tumors, Bhagandara, apachi, slipada, charmakila, tilakala, keela, antravrdhhi, sandhisirachedha, nadivarana and sonitatipravrthi.^[12]

Contraindications of Agnikarma

Pitta prakrthi, Antasonita Koshta, Bhinna Koshta, Anuddrutha Shalya, Durbala, Baala, Vrddha, Bheeru, Anekavrana, and person unfit for Svedana Karma.^[13]

Procedure of Agnikarma

- 1. **Pre operative procedures:** Patient should be checked whether he/she is fit for the procedure and should be given *Sheetha* and *Pichila aharas*.^[14]
- 2. **Operative procedure:** Depending on the tissue that has to be cauterized, materials is selected and heated to red hot and placed over the site for a specific period of time.
- 3. **Post operative procedure:** The burnt area has to be protected from moisture A paste of *Madhu* and

Gritha is applied to reduce burning sensation and promote healing.^[15]

Samyak Dagdha Lakshana^[16]

In Twak – Shabdha Pradurbhava, Twak sankocha, Durgandha.

In Mamsa – Kapota Varna, Alpa Svayathu, Alpa Vedana, Sushka Sankuchitha

In Sira and Snayu – Krishnonnata Vranata, Sraava Sannirodha

In Asthi and Sandhi – Ruksharunata, Karkasa Sthira Vranata

Mode of action of Agnikarma

Agnikarma (Ushnaguna) >>Utkleshnam to Dhathu>> activates Dhatwagni>> digest Aama and achieve Niramavastha >> pacifies Vata & Kapha

Agnikarma produces a coagulative necrosis on the surface layers of skin which causes self-healing.

Seasons for Agnikarma^[17]

Cauterization should be done during all the seasons except autumn and summer.

Importance: Even in these seasons during emergency states amenable only to cautery, it may be used after taking appropriate counter measures against them.

Modern view

New methods of cauterizations are Infrared radiation, Short wave diathermy ,Microwave diathermy, Low intensity laser therapy, Ultra violet therapy, Photo therapy, Photo chemo therapy, Ultra violet photo therapy, Ultra sound therapy Low frequency current (neuromuscular electric stimulation, (electric muscle stimulation), Transcutaneous electric nerve stimulation.

1. Electrosurgery/ Daithermy

Electro surgery / diathermy the basic principle is to deliver a high frequency current to a human body means off a active electrode and this after passing through the tissue to the diathermies returns via a return electrode. They are three in type

- 1. Cutting type- cutting effect
- 2. Coagulating current- coagulate the tissue.
- 3. Blended current- both cutting and coagulation.

2. Low frequency current

It is always used for the following purposes such as strengthen and re-educating the muscles , reducing oedema, relief of pain wound repair, neuromuscular stimulation produce electrical pulse that cause excitation of peripheral nerves and subsequently muscle tissues.

They are of two types

- 1) Faradic
- 2) Galavic

3. Infrared radiation

Infrared radiation produces thermal changes according to the absorption of radiation which leads to molecular vibration and this motion is lead to the thermal changes. Used in pain, joint stiffness, oedema and skin lesion, psoriasis etc.

4. Infrared photo coagulation

Source: Infrared rays of 14 volt halogen lamb with a gold reflector rays are transmitted from fiber optic cable which terminates in a probe or pistol for the coagulation. This involves the employment of infrared heat to treat minor internal haemorrhoids and its advantages are quick and easy, noninvasive, Painless with negligible complication, Coagulation time one second, Useful in piles management, No unwanted destruction of surrounding tissues.

5. Shortwave diathermy

It is non- ionizing radiation from the radio frequency portion of the electromagnetic spectrum. It increases blood flow, assist in resolution of inflammation, increase the extensibility of deep collagen tissues, decrease joint stiffness relieve deep muscle pain spasm.

6. Micro wave diathermy

Although deeper the superficial heating, is not as capacitive short wave or ultra-sonic heating. Increases extensibility of collagenous tissues, reduce joint stiffness and lengthening of shortened quadriceps muscles.

7. Low intensity laser therapy

The term laser is an acronym for light amplification by stimulated emission of radiation. As alternatives to metal scalpels as well as for tumor ablation and tattoo removal are all based upon tissue reaction, Stimulation of wound healing in various types of closed wounds, Treatment of various arthritic conditions treatment of soft tissue injuries and relief of pain.

8. Ultra violet therapy

Ultra violet photo therapy began with the work of danish – neilsfinsen – nobel prize 1903 for treatment of cutaneous tuberculosis. Heliotherapy - using sun, actinotherapy – using lamb Indications are psoriasis, eczema, acne, vitiligo, pityriasislichenoids, chronice, pruritis etc.

9. Ultrasound therapy

Ultra sound enters the body, it can exerts an effect on the cell and tissue via two physical mechanisms – thermal and non thermal. A biological significant thermal effort can be achieved if the temperature of the tissue is raised to between 40 degree to 45 degree centigrade for at least five minutes. Controlled heating can be produced desirable effects, which include pain relief, decrease in joint stiffness and increased blood flow.

The effect of ultrasound in body tissue is

i) Inflammatory phase of repair; ii) proliferation phase of repair; iii) bone repair iv) Pain relief.

10. Radio frequency coagulation

High frequency radio waves of 3.8 mhz. Release of energy which produces coagulation with the tissues which occur as a result of heat produces by the tissue resistance to the passage of high frequency wave. The heat makes the intracellular water boil, increasing the cell inner pressure to the point to breaking it from inside to outside. (Cellular volatilization) Used in first and second degree internal hemorrhoid management.

11. Ultroid

Ambulation with encouraging result. It consists of single use sterile probe, a grounding pad and a non- conduction anoscope connected to a monopolar low voltage instrument including generator unit. The probe is placed apex of piles, voltage increase kept up to 10 minutes. Until the popping sound ceases, then current decreased to zero.

DISCUSSION

Salvatantra is one of the important branch of Ayurveda based on six major methods of management such as Bhesajkarma, Ksarakarma, Agnikarma, Sastrakarma, Yantrakarma, Raktamoksana. Agnikarma is superior among them and boon for local Vata&KaphajaVyadhi and diseases treated by Agnikarma do not recur. It gives instant relief to the patients. There is no fear of complication such as putrification and bleeding due to contact with Agni. According to Acharya Sushruta when Bheshaja Chikitsa, Kshar Chikitsa and Shastrachikitas are unable to cure the disease only then Agnikarma can be used. Agnikarma, due to its UsnaSuksma, AsukariGuna pacifies the Vata kaphadosa and removes Srotavarodha. Patient is effectively relived from stiffness, pain and other associated symptoms. In contemporary Science also Agnikarma has been enumerated in different forms such as diathermy, infrared radiation, laser therapy, photo therapy, ultrasound therapy, low frequency current and transcutaneous electric nerve stimulation.

CONCLUSION

Agnikarma is indicated mainly for Vata & Kaphaja Vyadhi and diseases treated by Agnikarma do not reoccour. It gives instant relief to the patients. There is no fear of complication such as putrification and bleeding due to contact with Agni. In modern surgery after excision of corn, wartdressing, antibiotic, analgesic and anti inflammatory drugs are used Agnikarma chikitsause of such drugs can be prevented.

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