



Concepts of *Parasurgical* procedure in treatment of eye disease :

An *Ayurvedic* discussion.

Nutan Chougule*¹, Aparna N. Kekan², Ravikumar Suryawanshi³

1. Assistant Professor, Shalakya Tantra Netra Dept., Jain AGM Ayurvedic Medical College and hospital Varur, Karnataka
2. Associate Professor, Kriya sharir Dept., Jain AGM Ayurveda Medical College and Hospital Varur, Karnataka
3. Associate professor, Shalya Tantra Dept., R. K. University Ayurvedic Medical College and hospital , Rajkot, Gujarat.

*Corresponding Author: dr.nutanchougule@gmail.com Mob. : 07026169192

Abstract:

The parasurgical procedures have been given special place in *shastrakarma* by Acharya Sushruta & these procedures are more helpful and effective where medicine or surgery will not give those results what we expect. As we all know the father of surgery Acharya sushruta has described parasurgical procedures are *Agni Karma*, *Kshara karma* *Raktamokshna* are amongst these parasurgical procedures. In modern science it is used as heat cauterization, alkali burn and bloodletting. This article deals with various aspects of parasurgical process and its use in present context.

Keyword:

Parasurgical process, *Agnikarma*, *Kshara karma*, *Raktamokshna*, Cauterization, Blood Letting.

Introduction:

In Indian system of *ayurveda* medicine, Acharya Sushruta explained parasurgical procedures are *Bheshaja Karma* (Medicinal use), *Kshara karma* (Chemical cauterization), *Agni Karma* (Heat cauterization) and *Raktamokshana* (Bloodletting) etc. parasurgical procedures explain to treat eye diseases like *pakshmakopa*, *puyalasa*, *Abhisyananda* and *Adhimantha* etc. The true meaning of this article to discuss the various basic concepts of para-surgical to treat eye diseases.

In modern science surgeons get trained in various techniques and now a days equipments become more advance but the basic principle are already explained very earlier in *ayurveda* in *vedic* era. The procedures like heat cauterization and

chemical burn used to remove the affected tissue from infectious area to prevent spread of organisms. Bloodletting procedure to wash out impure blood and increase immunity against infective foci.

Indications when to perform parasurgical procedures

- The disease contraindicated for surgery
- The patient is in *balyavastha*, or very stressed for any procedure
- Surgical instruments are not available
- Possible treatment without surgical treatment

Materials and Methods:

All the references of para-surgical procedures are collected and compiled from *Sushruta Samhita* and other *Ayurvedic* Scriptures, research papers and Journals of *Ayurveda*.

Acharya Sushruta described *yantra* in *sutrasthana* along with *upyantra* and *Anushastra*. *Agni*, *Kshara* and *Raktamokshana* by *jaluka* are described under *upyantra* as well as *anushastra*.

Aims and Objectives:

Aims- To discuss the concept of the parasurgical procedures in eye diseases.

Objectives-

To understand the concept of parasurgical procedures in treatment of eye diseases.

To elaborate the ancient science and its effects which replicate also in modern science.

Agnikarma and Ksarakarma

Agnikarma will cure the otherwise incurable conditions with medicines, or surgery. The diseases cured by *Agnikarma* will not reoccur⁷.

Type of *Agnidagdha*⁸

- *Twak dagdha*: Burning up to skin level
- *Mansa dagdha*: Burning deeper into muscle tissues
- *Sira Snayu Sandhi Asthi dagdha*: Burning much deeper up to bones.

Indications of *agni karma* in *netra roga*

- *Vartmagata roga* (Disease of eyelids): *Krichronmila* (difficulty in opening of eyes), *lagana* (cystic swelling), *Arbuda* (Tumor), and *Paksmoparodha* (Misalignment of eyelashes)
- *Sandhigata roga* (Disease of various junction of eyes): *Puyalsa*, *Alaji* (Dacrocystitis)
- *Sarvagata roga* (Disease of all part of eyes): *Abhisyanda* (Conjunctivitis) and *Adhimantha* of *Vataja* type. (Painful condition of eyes).

In the diseases of eye lids and eye lashes

Eye should be covered by wet gauze piece and the root of eye lashes in the lid margin should be burnt. Instruments like *Jambavosta*, needle or *shalaka* should be

used for *agnikarma*. By dipping in heated liquids like honey, beeswax, jaggery or other oily substances, the diseases of *varmta*, *upapakshma*, *lagana* and *linganasha* should be burnt¹⁰. The burning should be as deep as the blood vessels.

Kricromela (difficulty in opening of eyes): The treatment with *snigdha nasya*, *dhuma*, *anjana*, *tarpana*, *putpaka*, *basti* and *sweda* should be done initially. If it does not respond to these measures *agnikarma* should be done by touching the hot needle in row. The gap between one burn to the another should be the size of green gram. The *bindu* type of *agnikarma* should be done only upto the level of skin¹¹.

Bisa varmta, Slista varmta (Porous edema of lids) is not treated with *lekhna karma* then use of *Agni* and *Kshara* is mentioned by *Vaghabhatta*.¹

Paksmakopa (Misalignment of eyelashes) if other treatment measures are not useful, then the eyelid should be everted and the fold affected with the *dosha* should be burnt In *bisa varmta*, *slista varmta* and *paksmakopa*¹³.

Paksmoparodha (Misalignment of eyelashes)-Affected lid should be everted; *lekhana* and *pratisharana* should be done. If it does not respond, then it should be burnt with a hot needle or *shalaka yantra*.¹⁴

Upapakasma (Extra row of eyelashes): Second row of eye lashes should be pasted with *laksha rasa*. Lifted with *sandamsa yantra*. A fine needle is heated red hot and the *romakupas* should be burnt with it. Later *parisheka* and *nasya karma* is done¹⁵.

Bahya Alaji (Cystic swelling): *Agnikarma* should be done and treated like a burnt wound¹⁶.

Lagana (Cystic swelling): If *Pratisarana* and *anjana* is not responding then *agnikarma* is the choice of treatment¹⁷.

Abhisyanda and Adhimantha (Conjunctivitis and painful condition of eyes): *Agnikarma* should be done above the eyebrows, as a last measure. *Agnikarma* should be done only in *vataja* type of *abhisyanda* and *adhimantha*.

Puyalasa (Acute Dacrocystitis): if the disease is recurring after all the treatment measures, than *agnikarma* should be done with the help of fine needle.

Kshara Karma

Kshara karma is important among all the parasurgical procedures, due to its advantage of destroying *tridoshaja* disorders by excision and scraping action. It is effective in eye lid diseases like *lagana*, *arsho varmta*, *shushka arshas*, *vartmarbuda*, *pakshmakopa*, and *upapakshmamala*.

Different *Kshara* is used in different disease-*Lagana* (Cyst) - *Yavakshar*, *Tuttha*, *Gorochana*, *Pippali* with honey

Arsho varmta, *Shuskarsha*, (Trachoma) - *Eranda bija majja* or *vibhitaki kshara* with honey *Pakshmakopa*, *Upapakshma mala* (Misalignment of eyelashes) - *Gunja kshara* mixed with honey.

Raktamoksana

Raktamoksana is an important therapeutic procedure in *Shalya tantra*. It prevents skin diseases, swollen glands, general swelling and diseases of the blood, if done at regular

intervals²⁰. *Sira vyadha* and *jaloukavcharan* are useful in eye diseases.

Best time for *raktamoksana*

- Cloudless day in rainy season
- Cool day in summer
- Noon in winter

Indications

Following eye disease are treated with *Raktamoksana*-

- *Puyalasa* (Acutedacrocystitis)
- Complicated condition of *Arma* (Pterygium)
- *Savarna sukla* (Corneal ulcer)
- *Pittaj timira* (Painless loss of vision e.g. Hemorrhagic retinopathy)
- *Kaphaja timira* (Painless loss of vision e.g. Macularedema)
- *Abhisyananda* of all type (Conjunctivitis)
- *Adhimantha* of all type(Painful condition of eyes like congestive glaucoma, Uveitis)

Contraindications

- Very young, old, emaciated, exhausted
- Suffering from high fever, convulsions or unconscious patients
- General swelling in whole body
- Wasting due to unhealthy diet
- Anemia
- Piles
- Pregnant woman

Site of *Raktamokshan* in eye diseases

- Frontal area
- Outer canthus or inner canthus

Procedure

To open the veins in the head and neck, the patient is asked to put his fists on his neck and an assistant then puts a bandage around the neck and fists, and pull on it to make the

vein stand out. Patient is then asked to blow out with his mouth closed.

- In *Puyalasa*: *Siromoksana* should be done followed by *upnaha* and other measures mentioned for *akshipaka*
- In *Savarna sukla*: first *sarpipana* than later *siromoksana* is done, followed by *jaloukavcharana*, if remnants are not cleared.
- In *Pittaja timira*: After *sarpipana*, *sira vyadhan* is done.
- In *Kaphaja timira*: After *sarpipana*, *sira vyadhan* is done.
- In *Vataja abhisya* and: *Sira mokshan* is done when pain is not subsided
- In *Pittaja* and *Kaphaja abhisya* and: firstly *Ghratpan* than *Sira vyadha* is done.
- In *Raktaja abhisya* and: Repeated *Shiravyadha* is done. *Jaloukavcharan* is also useful.
- In chronic diseases of eye (*Pilla rog*)-*Shiravyadha* and *virechan* is done for complete recovery.
- In *Pothaki*: *Jaloukavcharan* is recommended.

Probable mode of action of *agni karma*

The local thermo therapy may increase tissue metabolism which may leads to excretion of the unwanted metabolites and toxins. Heat may stimulate lateral spinothalmic tract (SST) which leads stimulation of descending pain inhibitory fibre (DPT) which release of endogenous opioid peptide which binds with opioid receptors at substantia gelatinosa rolandi which inhibit release of P- substance (Pre-synaptic inhibition) and blockade of transmission pain sensation occurs

Probable mode of action of *kshara karma*

Kshara has *shodhana*, *ropana*, *shoshana*, *stambhan*, *vilyana* and *lekhana* properties. *Shodhana* property helps in elimination or expulsion of unwanted and harmful substance from the wound. It helps in desquamation of sloughs (debridement) and draining of pus. *Ropana* property helps in healing of wound due to anti-septic action of *kshara*. *Shoshana* property helps in drying up and absorption of mucus discharge that gets collected in ulcer bed promoting the granulation. *Stambhan* property of *kshara* helps contraction of opposing edges of ulcer to promote healing and *vilyana* property cause liquefaction and dissolving of localized unhealthy tissue. Hence by all these properties of *kshara*, healing property becomes faster.

Probable mode of action of *raktamokshana karma*

Raktamokshana removes vitiated *doshas* which cause the ailment. This modality falls under *purificatory* therapies, which cleanse the body and helps in maintenance of health.

Discussion:

Disease which is not curable by *Bhesaja*, *Shastra*, *Ksarakarma* in that place *Agnikarma* plays major role to cure those disease. *Agnikarma* is one of the methods to control Haemorrhage when other procedure is failed and also *agni* has prime role for sterilization. *Dalhana* has mentioned *Agnitapta sastra* prevent sepsis in surgical procedure. *Agnikarma* is also useful after *Sastra karma* to avoid recurrence. *Vata kapahaja vyadhis* are best managed by this as *vata* and *kapha* possess *sheeta guna*, for this to neutralize the *vata* and *kapha dosha*

require opposite *guna* treatment that is *ushna chikitsa*, *ushna guna* and *agni* having *anyonyasritabhava*, hence *agnikarma* virtue of its *ushna*, *tikshna*

sukshma and *laghu* property breaks *srotovarodha*, which produced by *vata* and *kapha dosha*. Thus *nirama kapha* and *vata dosha* are neutralized. It also acts like a *dosha dushya vighatana karaka* because *ushna guna* performs two functions. Firstly by stimulating i.e. *utklehana* of *dhatva agni* and due to this action *sama dhathu* (localized *ama*) is digested and secondly *ushna guna* dilated the channels of *srotas*. Due to this *srotovarodha* removed (clearing the respective *srota* channel), which was formed by *dosha – dushya samurchana* in *khavaigunya* at *dhathu* (tissue).

Conclusion:

Its applications are widely practiced in modern surgical practice-viz cauterization, laser, radiation etc. *Acharya Sushruta* has advocated five *Upakarma* for the management of *Sira*, out of them *Agnikarma* is the best one. It is an ambulatory treatment modality and affordable to the common man. It deals with the action of thermal energy in the human body. It is a potent and minimally invasive para surgical procedure which has wide application in pain, recurrent occurrence and in unwanted growth conditions. Even today we can practice safely with all precaution in case of recurrent *Trichiasis*, and for same management in chronic glaucoma. It is hypothetically stated that it is probably capable to break down various cycles of painful adhesions. For this

final conclusion more clinical research will be necessary (such as animal experiment).

Acknowledgement:

I would like to thanks my teacher Dr S P Golecha, Professor & HOD, Shalaky Tantra Dept. Ayurved College, Rahuri and I also thanks to Dr. Arun Magadam who helped me at every step.

References:

1. *Sushruta Samhita Sutra stana* 11/7, Hindi Commentary *Ayurveda Tattva Sandipika* written by Kaviraj Ambikadutta Shastri published by Chaukhambha Orientelia, Varanasi-221005
2. *Ibidem Sushruta Samhita Sutrastana* 12/10
3. *Ibidem Sushruta Samhita Sharirstana* 8/ 16,
4. *Ibidem Sushruta Samhita Sutrastana* 7/16,
5. *Ibidem Sushruta Samhita Sutrastana* 8/15,
6. *Ibidem Sushruta Samhita Sutrastana* 8/16,
7. *Ibidem Sushruta Samhita Sutrastana* 12/3,
8. *Ibidem Sushruta Samhita Sutrastana* 12/8,
9. *Ibidem Sushruta Samhita Sutrastana* 12/9,
10. *Astang Shamgraha sutrastana* 24/3, Sanskrit commentary by Indu, edited by Shiv Prasad Sharma, published by Chaukhamba Sanskrit series office ,Varanasi221001
11. *Ibidem Astang Shamgraha uttar tantra* 12/3
12. *Ibidem Astang Shamgraha uttar tantra*12/13,
13. *Ibidem Sushruta Samhita Uttartantra* 16/7,
14. *Ibidem Astang Shamgraha uttar tantra*12/22,
15. *Ibidem Astang Shamgraha uttar tantra*12/23,
16. *Ibidem Astang Shamgraha uttar tantra*12/24,
17. *Ibidem Astang Shamgraha uttar tantra*12/11,
18. *Ibidem Astang Hridya uttartantra* 16/21, Nirmla Hindi Commentary by Brahmanand Tripathi published by Chaukhamba Sanskrit Pratishtan, Delhi110007
19. *Ibidem Astang Shamgraha uttar tantra* 20/36,
20. *Ibidem Sushruta Samhita Sharir stana* 8/ 23,

Conflict of Interest: Non

Source of funding: Nil

Cite this article:

"Concepts of Parasurgical procedure in treatment of eye disease : An Ayurvedic discussion."

Nutan Chougule, Aparna N. Kekan, Ravikumar Suryawanshi

Ayurlog: National Journal of Research in Ayurved Science- 2021; (09) (01):01- 06