

REVIEW ON PARASURGICAL PROCEDURES (ANUSHAstra) IN AYURVEDA SURGERY

¹*Dr. Suresh Kumar, ²Prof. Mahesh Dixit, ³Dr. Namonarayan Meena and
⁴Prof. Harimohan Meena

¹PG Scholar, PG Dept. of Shalya Tantra; M.M.M. Govt. Ayurved College, Udaipur.

²Principal and H.O.D; PG Dept. of Shalya Tantra; M.M.M. Govt. Ayurved College, Udaipur.

³Professor PG Dept. of Shalya Tantra; M.M.M. Govt. Ayurved College, Udaipur.

⁴Associate Professor PG Dept. of Shalya Tantra; M.M.M. Govt. Ayurved College, Udaipur.

Article Received on
28 December 2023,

Revised on 18 Jan. 2024,
Accepted on 08 Feb. 2024

DOI: 10.20959/wjpr20244-31087



*Corresponding Author

Dr. Suresh Kumar

PG Scholar, PG Dept. of
Shalya Tantra; M.M.M.
Govt. Ayurved College,
Udaipur.

ABSTRACT

Ayurveda is the ancient system, considered to be the first medical record of ancient knowledge and civilization in the world. The *Sushruta Samhita* is an *Ayurvedic* text by legendary *Sushruta* foundational to *Ayurvedic* medicine, with innovative chapters mainly on surgery. He mentioned various surgical and parasurgical procedures. When surgical procedures are carried out without the use of surgical instruments, they are referred to as parasurgical or karma techniques. In *Ayurvedic* surgical science, *Kshara*, *Agni*, and *Jalauka* are employed as parasurgical techniques for a variety of diseases. *Anushastras* are useful in the treatment of a variety of surgical disorders. Diagnosing various surgical disorders like *Shalya Yukta Vrana* and *Nadivrana* is similarly beneficial. These are very little intrusive *Karmas*. The wonders of *Shalya* practice are the parasurgical treatments, which can be performed on patients with little discomfort.

The outcomes are less expensive, more pleasant, and more beneficial to treatment. These days, this branch is becoming more and more popular as evidenced by its many advantages over invasive methods.

KEYWORDS: *Anushastra Karma*, Parasurgical methods, *Kshara Karma*, *Agni Karma*, *Jalauka* etc.

INTRODUCTIONS

Among other topics, *Yantrakriya*, *Shastra Kriya*, and *Shalyakriya* are covered in the *Shalya Tantra* branch of *Ayurveda*. In addition to these main activities, the *Shalya Tantra* has other lesser or parasurgical operations that are detailed in detail called *yantras*. The traditional literature of *Ayurveda* mentions numerous surgical operations that are different from significant *Ashtvidhashastra*, or parasurgical procedures, in addition to numerous surgical procedures that are distinct from major *Karma*-, or main, procedures. We call these practices *Anushastra Karma*.

The main surgical methods are called *Anushastra*. Add *Agnikarma*, *Jalaaukavcharana*, *Kshara Karma*, and so forth. *Sushruta* described the fifteen forms of *Anushastra*, etc. These are the following: *Agni* (flame), *Kshara* (alkali), *Nakha* (nails), *Goji*, *Shephalika* (Harashringar leaf), *Shaka-Patra*, *Kareera*, *Bala* (hair), and *Anguli* (finger). *Twakasara* (bamboo bark).

These are suggested in children who are sensitive fearful and do not have surgical tools. *Kshara karma*, *Agnikarma* and *Jalaaukavcharana* are three most important *anushastra karma* included in *shashtiupakrama* and are used widely in wound management. *Anushastras* are used successfully to handle different operating situations. Diagnosis of the various types of sinuses and fistulas by *Eshan karma* is equally useful. For the treatment of *Nadi* (sinus), *Shalyayukta* (Wound with foreign body), *Unmargi* (fistula) and *utsangi* (cavity wounds), we now use different types of specimens (*eshani*) in general for a few days we can use *bala*, *anguli* or *kareernaal* instead of *eshani*. *Sushruta* counts these under *anushastra*. *Aacharya Sushruta*, who is worshipped as the father of surgery, has described different methods of treatment related to both surgical and parasurgical procedures.

One of these parasurgical forms is *Agnikarma*. It has been widely used in a variety of clinical contexts, depending on the physician's background and experiences. The practices of *Kshara Karma* and *Jalaaukavcharana* have received primary attention in attempts to treat many kinds of ailments due to the increasing interest in contemporary *Agnikarma* parasurgical techniques. Despite being a parasurgical operation, *Agnikarma* is recommended as the preferred treatment for numerous ailments, with formal indications in *Vata* and *Kapha*-related morbidities. Additionally, this therapy's application is expanded to include conditions that have been proven to be resistant to standard *Sheeta-Ushana-Snigdha-Rooksha* treatment.

Kshara is the greatest because it can be a more effective replacement for *shastra* and performs *Chedana*, *Bhedana*, and *Lekhana* activities simultaneously. The *Kshara* therapy prevents the ailments from returning. Following the discovery of several *Kshara* modifications, including *Kshara Pichu*, *Varti*, and *Sutra*, the treatment of infected wounds, particularly sinuses, has undergone a revolution.

The two primary varieties of *Kshara* are *Pratisarniyakshara* and *Panneeyakshara*. Out of *Shastra* and *Anushastra*, *Kshara* is the greatest. *Pratisarniyakshara* is primarily used to treat wounds and a variety of anorectal conditions, including *Gudabhramsha* (rectal prolapse) and *Arsha* (haemorrhoids). In addition to *Pratisarniyakshara*, *Kshara Sutra* and *Ksharavarti* are also used in the treatment of a wide range of illnesses, including *Dushtavrana* and *Bhagandara Nadivrana*.

The father of surgery, Acharya Sushruta, classified it scientifically in a holistic way, and his management ideas hold true to this day. Among the remarkable concepts of Sushruta Samhita in modern science are the classification of traumatic wounds, prognostic evaluation and management through sixty procedures, emphasis on primary suturing in clean wounds, avoidance of sepsis, excision of extruded momentum, and careful suturing of intestinal perforation in the management of abdominal wound perforation. *Apatarpana*, *Alepa*, *Parisheka*, *Abhyanga*, *Svedana*, *Vimlapana*, *Visravana*, and more processes are among the sixty procedures. He also mentioned the *Karma*, or acts, that the *Anushastra* known as *Anushastra* does among them. *Karma* is the term for parasurgical operations carried out in the absence of surgical tools using non-surgical supplies or equipment. Several *Anushastras* were described by Acharya Sushruta.

Raktamokshana: Every parasurgical technique and tool is distinct, and each tool has a specific purpose. And among them is *Raktamokshana*. *Raktamokshana*, or bloodletting, is a special para-surgical technique that dates back to the *Vedic* era and is recommended in a number of illnesses when there is severe *Raktha* vitiation. It is highly effective as a preventative measure against specific ailments. Even while it seems like a pretty archaic kind of treatment, it really is a highly beneficial one.

To remove vitiated blood from the body is known as *Raktamokshana*. Usually, only 10–14 millilitres of blood are extracted at a time. *Raktamokshana* is the least extensive of the five *Panchakarma* techniques, although it can nevertheless bring about relief quickly.

Furthermore, there are some acute diseases that can be resolved quickly, which is highly beneficial when time is of the essence.

Raktamokshana, in which a small amount of blood is extracted from the body, aids in the patient's rapid recovery. *Raktamokshana* is used to treat blood-related conditions such as varicose veins, edoema, eczema, leucoderma, herpes, and localised discomfort. *Raktamokshana* Therapy can treat a variety of health conditions, including jaundice, ulcers, gout, piles, abscesses, etc.

MATERIAL AND METHODS

This study reviews the literature on *Anushastra Karma* with a focus on the methods of *Kshara Karma*, *Agnikarma*, and *Jalaukavcharana* as explained by the ancient *Acharya Sushruta* in the *Sushrutasamhita*. There are fifteen different forms of *Anushastra*, according to *Sushruta*. The following are a few of the well-liked and currently accessible options.

1. *Kshara karma*,
2. *Agnikarma*,
3. *Jalaukavcharana*

KSHARA KARMA

Kshara is a drug from various medicinal plants ash. *Kshara* is primarily of two types—*Paaneeya Kshara* and *Kshara Pratisarneeeya*. Between *Shashtra* and *Anushastras*, *Kshara* is strongest. *Pratisaraniya Kshara* is mainly used in wound management, various anorectal disorders such as *Arsha* (Haemorrhoids), *Gudabhramsha* (Rectal Prolapse). In wound management it is mainly used for *Shodhana* (debridement). *Kshara's Ushna* and *Tikshna* qualities are beneficial for wound debridement. The *Vranalakshana-Utsannamansan* (elevated margin and hypergranulation tissue), *Kathinana* (hard consistency), *Kanduyukta* (severe itching), *Chiroththitan* (chronic wounds), and unhealthy wounds that are easily cleaned—that is, aid in the preparation of the wound bed, which is the primary management in chronic wounds—were all clearly mentioned by *Sushruta*. *Pratisaraniya kshara* also aids in *Darana Karma* in cases with big pus pockets with no opening, particularly in situations when surgical intervention is not possible, such as wounds on children, the elderly, weak patients, panic patients, women, and wounds over delicate and critical areas. Two other variations of *Kshara Karma*, *Kshara Sutra* and *Ksharavarti*, are employed in the treatment of *Nadi* (Sinus) and *Bhagandara* (fistulas). Alternative treatments for these illnesses are challenging. This is a result of its compromised edge, hidden infectious site, and challenging

wound debridement. Both *Shastra Karma* and *Anushastra* (Kshara sutra & Ksharavarti) are used to cure these problems. *Sushruta* stated that *Kshara Sutra*, not *Chhedana* (surgery), should be used to cure *Nadi* (sinus), which is present over critical portions in patients who are weak, malnourished, and nervous. The *Kshara Sutra* likewise treats *Bhagandara* in the same way. Every *Ayurvedic* source describes *Ksharavarti*, another cleansing agent, as a good treatment for *Nadi*. In locations where *Shastra* is neither suitable or effective, *Kshara* is also utilised.

Procedure of Kshara Karma (Pratisaarniya Kshara)

Purva karma (Pre-Operative Care): When a patient is cleared for therapy, they are appropriately prepared. To help patients understand the course of treatment, they are counselled and given an explanation of the procedures. *Agropaharaniya*: Materials like *Pratisaarniya Kshara*, *Nimbu Swarasa*, spatula, cotton, bowl, proctoscope, *Changerighrita* / *Jatyadighrita*, or *Taila* are kept ready before to beginning the necessary procedure.

Pradhana karma (Operative Procedure): The patient is positioned on the surgical table for the lithotomy. After cleansing and manual anal dilation, local anaesthesia is administered. Spread the *Pratisaarniya Kshara* evenly across the pile's bulk or any other selected region after placing it in a bowl. It lasts till the colour changes to *Pakwajambu's Phala Varna*.

Pashchata Karma (Post-operative Care): Applied *Kshara* is wiped, followed by *Nimbu Swarasa* with distilled water. The procedure can be repeated for 2, 3 times depending on disease indication and severity. The procedure can be repeated at 21 days' intervals for 2nd or 3rd sessions if required.

AGNI KARMA

Agni Karma is the second important *Karma* of *Anushastra* that all *Acharya* identify. There are so many devices called *Dahan Upkarana* for *Agnikarma* such as *Pippali*, *Ajashakrit*, *Godanta*, *Shalaka* (samples) *Ghrita*, *Tail* and *Guda*.

According to Akriti, Agnikarma may be of following types

Valaya - Circular shape.

Bindu - Dot like shape. According to *Acharya Dalhanashalaka* should be of pointed tip.

Vilekha - Making of different shapes by heated *Shalaka*. *Vilekha* type of *Agnikarmas* further subdivided by *Acharya Dalhana* into three types according to the direction of line *Tiryaka*(Oblique), *Riju* (Straight), *Vakra* (Zigzag)

Pratisarana- Rubbing at indicated site by heated *Shalaka* and there is no specific shape.

According to *Ashtang Hridaya* there are 3 more types of *Agnikarma* based on *akriti*

Ardhachandra- Crescent shape,

Swastika- Specific shape of *Swastika Yantra*.,

Ashtapada - Specific shape containing eight limbs in different directions.

Different types of *Agnikarma* performed act to body parts-*Twakdagdha*, *Mamsadagdha*, *Sirasnadagdha* and *Asthi Sandhi Dahana Upkarana* are used according to site. So *Agnikarma* can be classified as.

***Twakgatavyadhi*:** Diseases involving skin; *Pippali*, *Ajashakrita*, *Godanta*, *Shara*, *Shalaaka* are used.

***Mamsagatavyadhi*:** for diseases involving muscles, *Jambavaushtha*, *Panchadhaatu Shalaaka Kshaudra* are used.

***Sira Snayu Asthisandhi*:** for diseases of *Sira*, *Snaayu Sandhi*, *Marma* diseases *Madhu* (*Kshaudra*), *Guda*(jaggery) and *Sneha* are used.

Procedure of *Agnikarma*

***Poorva Karma*:** A patient who is considered fit for procedure is prepared accordingly., Patients are counselled and given explanation about the procedure in order to make them aware about the process of treatment.

***Agropaharaniya*-** Gas cooker, *Shalaka*, *Madhuyashtichurna*, and *Ghririkumari* are kept ready before starting the procedure. The area is marked and cleaned.

***Pradhana Karma*:** Panchdhatu *Shalaka* or any other *Dahana Upkarana* is chosen for a particular ailment. Panchdhatu *Shalaka*: The *Shalaka* is applied to the selected area after being heated to a red-hot temperature on a gas hob. Depending on the necessity and indication, the process is repeated. Given that frozen shoulder is *Snayusandhigata Vikara*, *Guda*, *Sneha*, or *Madhu* are chosen as *Agnikarma's Upkaranas*. As soon as the process is

finished, the region is treated with *Ghrithkumari Majja* pulp and then *Madhuyashti Churna*. Throughout the surgery, the patient is closely watched for any unintended problems. Patients are recommended to avoid strain, pain, and an unhealthy diet, as well as to keep the region dry and clean. The same process can be repeated, depending on the condition and how severe it is.

JALAUKA WACHARANA (LEECH THERAPY)

The third most significant *Anushastra* karma is *Jalaukawacharana*, which is depicted by an old acharya. *Raktamokshana's* approach is called *Jalaukawacharana*. *Raktamokshana* has been described in the *Ashtanghridya* and the *Sushruta Samhita*. There are two *Ashastrakrita* and *Shastrakrita* techniques in it. Additionally, *Shastrakrita* employ two techniques: *Pracchana* and *Siravedha*. The following tools can be used to complete the *Ashastrakrita* method: *Ghati*, *Jalauka*, *Alabu*, and *Shringa*. There are six *Jalauka* in each of the two primary varieties of *Jalauka*, *Savish* and *Nirvisha*. *Nirvishajalauka* has medicinal properties. They are recommended for a number of illnesses, including *Raktajaroga*, *Dushtavrana*, and *Twakroga*. *Jalauka* is typically used at the first stages of a wound's progression in wound management. *Raktamokshan* lessens discomfort and keeps the suppression of early edoema from occurring. Wounds exhibiting reddish-black hue, soreness, hardness, inflammation, and uneven surface can be treated with *Raktamokshana*.

Application of Jalauka (Jalaukawacharana)

Jalaukawacharana is divided into 3 parts as other procedures-

Purvakarma (Pre-operative Care)

a) Purification of Jalauka: *Jalauka* is kept in *Haridra Jala*, in a kidney tray half filled with fresh water, containing *Haridra Churna*.

b) Preparation of Patient: Before applying *Jalauka*, proper counselling for better outcome of *Jalaukawacharana* should be done by the patient. Patient should be in a position to lie down preferably. The part to apply *Jalauka* is cleaned with antiseptic solution.

Pradhana karma (Operative Care): The first step is to identify the body portion on which the *Jalauka* indicator is to be put. The chosen location is meticulously cleaned. Over the chosen area, *Nirvisha Jalauka* is maintained.

Jalauka remains in this area. If the *Jalauka* does not stick, pierce the area with a sterile needle and apply the *Jalauka*. *Jalauka* draws blood through its anterior sucker, which is joined to the base by a posterior sucker. To shield the *Jalauka* from the intense heat of the blood, cover it with a cold, damp cotton swab while it is sucking blood. The number of leeches used depends on the disease's severity and overall state.

Pashchata karma (Post-operative Care)

a. *Jalauka* Care: The *Jalauka* is eliminated from the area by scattering *Haridra churna* or *Saindhava*; if the *Jalauka* is fully swallowed, it departs the area on its own. The *Haridra churna* is used to induce vomiting in *Jalauka*, which then drains the drawn blood from the mouth by slowly and gently squeezing the tail to the mouth and holding it in fresh water. After a week, *Jalauka* can be administered once more. If the *Jalauka* cannot move freely in the water, it is considered unhealthy and is referred to by the *Sushruta* as *Durvanta*.

b. Patient Care: Since *Triphala Kashaya*, *Haridra Churna*, and *Madhu* have analgesic, hemostatic, and antiseptic properties, they ought to be applied to the affected area. After bleeding has stopped, tight bandaging should be applied to reduce the chance of bleeding again. The patient is instructed to observe blood seeping from the wound for one to eight hours.

Contraindication of *Jalaukavacharana*: It is contraindicated in the treatment of haemorrhagic diseases such as haemophilia, severe anaemia, coagulopathy, hypotension, active tuberculosis, fever of high grade, patients with immunocompromised.

DISCUSSION

The most important and useful method in *Shalya Tantra* is *Shastra Karma*, which is very useful in treating surgical illness. As the *Acharya* has mentioned, there are certain conditions or locations where we are unable to perform *Ashtvidha Shastra Karma* or where the necessary *Shastra* is not available; in those cases, we must employ substitute tools. The meaning of *Anushastra Karma* is found there. There are three main *Anushastra karma* in the current era. *Kshara Karma*, *Agnikarma*, and *Jalauka karma* are becoming more and more well-liked due to their effectiveness. *Kshara karma* is used to cure *Arsha* (haemorrhoids), *Gudabhransa* (rectal prolapse), and *Kshara Sutra* (for sinuses and fistulas). When applying *Kshara*, it should remain as *Pakwa Jambuphala Varna* until 100 *Matra Kala* as described by *Sushruta* and *Samyaka Dagdh Lakshana* appear. After that it should be washed with *Nimbu Swarasa* to prevent extra caustic effect of *Kshara*. The probable mode of action of

Pratisarneeya Kshara is, as it creates a chemical burn on prolapsed rectal mucosal folds which causes cicatrization (in wound healing process) and may strengthen the anorectal ring in rectal prolapse. Its importance lies in its action, because of its ability to cure those diseases which can't be cured by the *Bheshaja Shastra*.

Because *Agnikarma's Ushnaguna* is in opposition to *Vata* and *Kaphadosha's Sheetaguna*, it relieves all *Vataja* and *Kaphaj* illnesses. Every *Dhatu* (tissue) has a unique *Dhatvagni*, and diseases start to show symptoms when this *Dhatvagni* falls. This is the basis of Ayurvedic medicine. *Agnikarma* treats this condition by using external heat, which raises *Dhatvagni* and helps to calm the agitated dosha and lessen the illness.

Jalauka manages *Dushta Vrana* in a more efficient manner. Chemicals that impact the affected portion include Bdelins (Trypsin plasmin inhibitor), Hirudin, Hyaluronidase, and Carboxypeptidase-A inhibitors, among many others found in leech saliva.^[16] Bdelins are discovered to have an anti-inflammatory effect at the location of the wound. Hyaluronidase has characteristics similar to those of antibiotics. Carboxypeptidase-A inhibitors increase blood flow to the wound site. The compounds in *jalauka* saliva that resemble histamine and acetylcholine have been found to act as vasodilators on the microvasculature over the application site. The blood flow is increased by all of these features, which include anti-inflammatory, antibacterial, and vasodilatation, and they are all highly helpful for healing wounds. increased blood flow will result in an increase in oxygen delivery and ultimate removal of harmful substances from the affected area.

CONCLUSION

Anushastra is equally important for *Shastrakarma* in surgical practice. Ayurvedic texts often reference *Kshara* at various stages of the wound-healing process. *Pratsarniya Kshara* is used to treat chronic wounds that refuse to go away. Under local anaesthesia, *Kshara Karma* is a convenient, nursery procedure with few and infrequent post-procedural complications that are insignificant. It is also incredibly economical. *Agnikarma* therapy is goal-oriented for *Sthanika* participation of *Vata* in *Vatakaphaja* illnesses. For the average person, it is an affordable outpatient therapy option. *Agnikarma* makes use of severe and lethal natural wounds. With a very low cost-effectiveness, *Jalaukavacharana* has shown to be extremely helpful in treating a range of skin problems, including chronic non-healing ulcers and others.

REFERENCES

1. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 7(15): 39.
2. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 7(16-17): 39.
3. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 7(18): 39.
4. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 11(6): 46.
5. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, chikitsasthana, 2002; 1(8): 5.
6. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, chikitsasthana, 2002; 1(88): 13.
7. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, chikitsasthana, 2002; 17(29): 109.
8. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 11(3): 45.
9. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, chikitsasthana, 2002; 5(4): 46.
10. Sushruta, Sushrutasmhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 12(4): 51.
11. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 12(11): 52.
12. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 12(8): 51.
13. Rishu Kumar Sharma Et Al: Management of Dushta Vrana By Jatyadi Ghrita Followed By Jalaaukavacharna, IAMJ, 2017; 5(3): 782-793.
14. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 13(12): 58.
15. Sushruta, Sushruta Samhita with Ayurveda Tatva Sandipikahindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Sansthan Varanasi, sutra sthana, 2002; 13(19-22): 60.

16. <http://leeches-medicinalis.com/the-leeches/biology/> dated 8/2/19