



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

CONTEMPORARY UTILITY OF RAKTAMOKSHANA W.S.R TO EASE OF PRACTICE

Dr Siddanagouda A. Patil¹, Dr Anuja kitturkar²

1. Professor, Department of Shalyatantra, Ayurveda Mahavidyalaya and Hospital, Hubballi.
2. P G Scholar, Department of Shalyatantra, Ayurveda Mahavidyalaya and Hospital, Hubballi.

ABSTRACT- It was Ayurveda of ancient India that established the modern concepts of surgery. From Sushruta Samhita, it is known that thousands of years ago very skillful methods of surgery were practiced. There are several surgical and Para surgical procedures mentioned in ancient Ayurvedic texts which are practiced today by making few technical innovations. Among these one such para surgical procedure is Raktamokshana (bloodletting). Vitiating of Rakta leads to manifestation of varied pathological entities. Rakta and Pitta doshas cause various disorders that cannot be cured by Shamanaushadi wherein a procedure Raktamokshana plays an important role, it is widely indicated in most of the blood borne diseases, poisoning, and skin disorders. It is an accredited application of Ayurveda as well as few other ancient traditional practices. Sira Vedhana, Sringa Avacharana, Alabu Aavacharana, Jalauka Avacharana, Prachhana Karma, Suchi Avacharana and Ghati Yantra Avacharana were approaches planned for bloodletting. Leech therapy, Venesection, Cupping therapy which have gained popularity today are modifications with different technical variations in Raktamokshana. Currently, Most of the Ayurvedic practitioners are performing Raktamokshana therapy. However, there are various practical concerns related to safe practice of Raktamokshana. Hence skillful and safe practice of bloodletting therapy is the need of the hour. Various bloodletting procedures are discussed here without compromising the basic principles.

Keywords: Raktamokshana, Bloodletting, Prachhana, Shringa, Jalouka, Alabu, Ghati.

INTRODUCTION

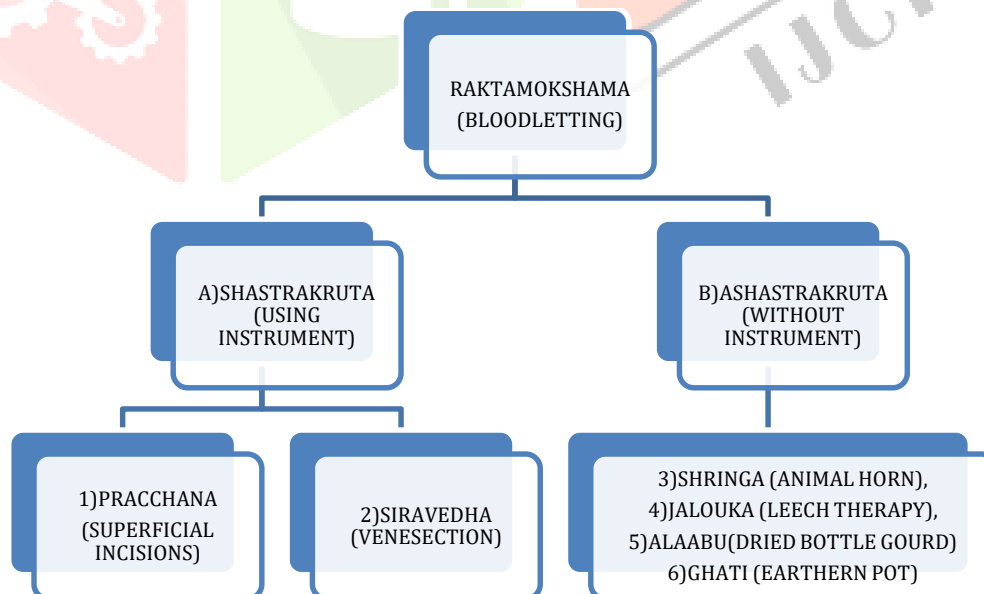
Acharya Sushruta has mentioned that diseases those are not relieved by *Snehana*, *Lepanadi* measures are believed to be arising from *dushita Rakta*¹. In these circumstances *Raktamoksana* (bloodletting) is the line of management. According to *Acharya Charaka*, diseases which are not relieved by *sheeta – ushna*, *snigdha – ruksha chikitsa*, should be considered as *raktaja disorders*². Vitiating of *Rakta* leads to varying pathologies causing numerous diseases. *Rakta* and *Pittaja* doshas cause various disorders that cannot be cured by *Shamanaushadi* (internal mediciations) wherein *Raktamokshana* plays a role. *Rakta* plays important role in spreading the disease from one part to the other part of the body by carrying the *Vikruta doshas*. *Raktamokshana* is widely indicated in most of the blood borne diseases, poisoning, and skin disorders. The school of *Sushruta* applied this technique therapeutically as well as prophylactically. *Acharya* has stated that those who adapt *Raktamokshana* regularly, remain free from *Twak dosha*, *Granthi*, *Shopha* and many *Raktaja vikaara*³. Though *Sushruta* and *Charaka* have mentioned different sites of *Raktamoksana* in various disease conditions the ultimate

aim is to remove or expel the vitiated *dosha*. It is an accredited application of Ayurveda as well as few other ancient traditional practices all around the world. A variety of instruments have also been mentioned in classics for the practice of *raktamokshana* amongst which *Sira Vedhana*, *Sringa Avacharana*, *Alabu Aavacharana*, *Jalauka Avacharana*, *Pracchanna Karma*, *Ghati Yantra Avacharana* and *Suchi Avacharana* were approaches utilized for bloodletting. *Raktamokshana* by *Siravyadha* is considered to be the supreme as it drains out the vitiated *Rakta* from all over the body⁴. *Siravyadha* is also considered as the whole and soul of the surgical branch in Ayurveda, it has been accredited as *ardhachikitsa* of *shalyatantra* which hints towards the weightage of this therapy in the entire subject⁵. Similarly, *Acharya Vagbhata* has highlighted its importance by calling it a procedure which eradicates the disease from its root effectively and quickly if performed meticulously⁶. Despite of wide application and therapeutic benefits of *Raktamokshana* there are various practical difficulties during the procedure even in ayurvedic graduates as there may be some apprehension regarding the procedure to develop some local as well as systemic complications that may be difficult to tackle at day care or OPD setup. Lack of exposure as well as skills in using instruments mentioned in classics can also be a matter of concern.

On the other hand, therapeutic phlebotomy is evolved form of bloodletting which has indication in polycythemia vera, iron overload, hereditary hemochromatosis, porphyria cutanea tarda, and testosterone replacement therapy, these patients are encouraged routinely to donate blood on the same grounds. Phlebotomy is now considered to be the mainstay of treatment in patients of polycythemia vera and supposed to be the foundation therapy for patients with hereditary haemochromatosis. Just like any other invasive procedure therapeutic phlebotomy also has some limitations. After effects that may occur following therapeutic phlebotomy are similar to those after any blood donation. Therapeutic phlebotomy is performed more frequently than voluntary blood donation and therefore must be done by a physician well versed in the practice of bloodletting.

Classification of *Raktamokshana* is given as follows⁷-

Raktamokshana has been broadly classified into two i.e those using sharp instruments which includes two procedures i.e *prachhana* where superficial uniform incisions are made, *Siravyadha* which is nothing but venesection. On the other hand, other equipments like *shringa* i.e using cow's horn, *Alabu* (*Cucurbita lagrenaria*), *Ghati* (earthen pot) are used for sucking vitiated blood after multiple pricks, *Jalouka* (leech) have also been used since ages and have gained popularity in recent times besides the discussion of its availability and utility are beyond the scope of this article.



Flowchart 1: Classification of *Raktamokshana*

Aims: The prime aim of this article is to list out functional resolutions in practice of *Raktamokshana* in various disorders on scientific & clinical background.

Objectives To review the application of various materials used to perform Raktamokshana without compromising principles of Ayurveda.

MATERIALS AND METHODS:









Table 1 Shows the various indications and area of action for different materials used for Raktamokshana^{8,9}









Type of Bloodletting	Desired Action
Siravedha	Sarvadehika
Pracchana	Ekadesha sthitha or localized, solidified
Jalouka	Deep seated, Grathitam, Avagadham
Shringa, Alaabu, Ghati	Localized in skin, Altered sensation.
Raktamokshana also finds indication in skin disorders, inflammatory conditions, Toxicity, Mukha, Netra and Shiroroga, Joint afflictions, In pain manifested due to irritation of nerve fibers. It has been practiced with encouraging results in reassuring patients diagnosed with Gridhrasi and Lumbar spondylosis, Vicharchika (Eczema), Visarpa, Pidaka etc.	

Table 2 Lists the various equipments mentioned in classics and newer materials employed for bloodletting currently.

CLASSICAL INSTRUMENTS	CURRENTLY USED INSTRUMENTS
Shringa	Needle
Jalouka	Lancet
Alabu	Scalp vein
Ghati	Cupping set (Silicon, Glass, Ceramic etc)
Kutharika Shastra	Surgical blade
Vrihimukha Shastra	Insulin syringe

Table 3 Shows figures of various equipments mentioned in classics and newer materials employed for bloodletting currently

			
Shringa	Jalouka	Alabu	Vrihimukha Shastra
			
Kutharika Shastra	Lancet	Lancet	Needle

			
Surgical blade	Insulin syringe	Cupping kit	Wet Cupping
			
Prachanna	Siravyadha	Jaloukavacharana	Siravyadha

METHODS:

POORVA KARMA:

1. Each patient must be evaluated for being fit to withstand procedure, and screened for the various indications and contraindications mentioned in classics.
2. An appropriate method is selected for the specific case and preparations made accordingly.
3. Written informed consent of patients should be obtained and explanation and assurance regarding the procedure should be given.
4. Routine investigations like blood for routine, biochemical, coagulation profile and serology must be performed.
5. Instruments for monitoring vitals, instruments for bloodletting & sterile dressing materials to be kept ready beforehand.
6. Medicated oils for *Sneha abhyanga* & apparatus for *svedana* procedure must be arranged.
7. Patient is advised to take a light meal pre procedure

PRADHANA KARMA:

1. Site of bloodletting to be prepared by cleaning with antiseptic solution and patient is made to sit in comfortable position.
2. In case of *Siravyadha* tourniquet is applied above the level of *Siravyadha* to make the vein more prominent and easily accessible, gentle strokes by the index finger is given on the vein.
3. Then under all aseptic precautions bloodletting has to be done with firm hand and blood is collected in a measuring jar.

PASCHAT KARMA:

1. Once blood stops oozing then compress with sterile gauze piece until complete hemostasis is achieved. Wound care is of utmost importance, hence bandaging is done to arrest bleeding as well as to avoid sepsis in the wound.
2. Subsequently after the expected quantity of bloodletting using *Jalouka*, the detachment of leech should be done using Turmeric powder or salt sprinkling around its mouth region. Once leech is detached similar wound care is to be provided. The post procedure care, emesis of leech and its storage is beyond the room of this article.
3. Application of powders like *haridra*, *triphala*, *yashtimadhu* is also widely practiced post bloodletting for *Vrana Ropana* (wound healing) and its antiseptic properties.
4. The patient is advised to keep the foot end elevated, area dry, clean, avoid exertion, trauma after *Siravedha* and is restricted to apply any oil or cream over the area of bloodletting
5. Patient is observed, Vitals monitored and allowed to rest.

6. Patient is advised *patya apathy* as per the disease condition. Typically light, palatable diet is suggested after *raktamokshana*.

DISCUSSION

Raktamokshana is one of the five bio purificatory procedures as per *Sushruta's* School. Its importance has been highlighted in various inscriptions of Ayurveda but not only *Acharya Sushruta*. The procedure although invasive as compared to the other *shodhana* procedures but the intervention eliminates vitiated *Rakta Dosha*, along with *Pitta* from the body by using various techniques such as *Siravyadha*, *Jaloukavacharana*, *Shringa*, *Alabu*, *ghati* and *Prachhana*. Lack of expertise, lack of access to equipment as well as instruments needed for the procedure and unfamiliarity about the efficacy of *Raktamokshana* in various conditions has created a repercussion in the practice of *Raktamokshana* with comfort. However, In the present scenario, the current popularity of ayurveda as well as various disposable materials available, Ayurvedic practitioners must be able to perform Bloodletting confidently in a wide range of disorders with minimal hindrances.

We will now discuss how individual procedures can be made practically easier to perform by minimal adaptations. *Prachanna* is to induce bleeding by making multiple incisions, the procedure requires making superficial but sufficiently deep uniform incisions that do not overlap each other. Performing *prachanna* using lancet, surgical blade, or insulin syringes gives the physician control over the depth of incisions with minimal pain, but also has added advantages like easily availability, economic for the patient and easily disposable.

The principle of bloodletting in *Ghati*, *Shringa* and *Alaabu* is by creating suction, all three instruments are used after inducing bleeding by multiple pricks. The availability of these materials is scarce and its reuse is questionable & non practical. Currently Cupping therapy has gained attention wherein specialized cups are applied on skin to create suction. Various material cups as well as types of cupping are practiced based on requirement. These are available commercially, in various sizes, withstand temperature changes therefore can be sterilized and reused. *Shringa* involves sucking of blood by mouth which is not suitable due to risk of infections like HIV, Hepatitis B, Venereal diseases etc. The *Shringa* of cow is a biological element, its sale and use have legal concerns.

Siravyadha is claimed to provide maximum benefit, nevertheless using *Shastras* mentioned in classics can cause injury to vessels if performed inappropriately, using sterile needles or scalp vein gives easy access to vein with minimal injury. Certainly, no serious complication or an adverse event has been reported following *Raktamokshana* as it is safe and offers maximum therapeutic benefits if proper S.O.P. of the procedure is followed.

Iron and serum ferritin levels have also been associated with diabetes hyperlipidaemia, and other cardiovascular risk factors and in a recent study it was postulated that lowering iron levels could help to reduce these risk factors. Patients with metabolic syndrome who underwent iron reduction by phlebotomy had also shown statistically significant differences in glucose, HbA1C, HDL cholesterol, systolic blood pressure, iron and ferritin compared to control groups with $(P<0.001)^{10}$. Which highlights the scope of bloodletting in various non communicable diseases and as a precautionary therapy. Hence classical methods of *Raktamokshana* should be altered accordingly to overcome various difficulties as mentioned above without change in its basic principle and utilized widely.

CONCLUSION

Raktamokshana is gaining popularity in Ayurvedic surgical practice, a lot of trained ayurvedic practitioners are practicing bloodletting therapy successfully across the country. But still its access to masses is lacking. The need of the hour is to grow awareness among practitioners as well as patients towards the fruitfulness of *Raktamokshana*. Using instruments such as needles, scalp vein, insulin syringes, cupping kit makes the procedure easy, non-tedious and safe to practice even in small setups. It is beneficial for the patient as well as practitioner. Hence these instruments must be accepted and used by Ayurvedic physicians.

REFERENCES

1. Sushruta Sharira Sthana 8/22 Sushruta Samhita, Nibandha Sangraha, Yadavji Trikamji Reprint edition 2010, Varanasi, Chaukhamba surbharti Prakashana.
2. Charaka Sutra Sthana 24/17 Charaka Samhita, Ayurveda Deepika, Yadavji Trikamji, Reprint edition 2009, Varanasi, Chaukhamba Orientalia.
3. Sushruta Sutra Sthana 14/34 Sushruta Samhita, Nibandha Sangraha, Yadavji Trikamji Reprint edition 2010, Varanasi, Chaukhamba surbharti Prakashana
4. Vagbhata Ashtanga Sangraha, Sutra sthana 36/3, Indu commentary, Vaidya ananth damodar athavle, , Reprint edition 1980 atreya prakashanam,
5. Sushruta Sharira Sthana 8/22-23 Sushruta Samhita, Nibandha Sangraha, Yadavji Trikamji Reprint edition 2010, Varanasi, Chaukhamba surbharti Prakashana
6. Vagbhata Ashtanga Sangraha, Sutra sthana 36/2, Indu commentary, Vaidya ananth damodar athavle, , Reprint edition 1980 atreya prakashanam,
7. Sushruta Sutra Sthana 14/25 Sushruta Samhita, Nibandha Sangraha, Yadavji Trikamji Reprint edition 2010 Varanasi, Chaukhamba surbharti Prakashana
8. T.Sreekumar, Principles of Ayurveda, Astangahrdaya Vagbhata, Sutrasthana -2, with English translation and commentary, chapter sastravidhi 26/54
9. T.Sreekumar, Principles of Ayurveda, Astangahrdaya Vagbhata, Sutrasthana -2, with English translation and commentary, chapter sastravidhi 26/55
10. Houschyar KS, Lüdtke R, Dobos GJ, et al. Effects of phlebotomy-induced reduction of body iron stores on metabolic syndrome: results from a randomized clinical trial. BMC Med. 2012; 10:54. [PMC free article] [PubMed] [Google Scholar].

