



# SIRAVYADHA: THE PRIME METHOD OF RAKTAMOKSHANA – A CLASSICAL AND CONTEMPORARY REVIEW

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## ABSTRACT

### Introduction

Rakta, considered the fourth dosha by Acharya Sushruta, plays a vital role in sustaining life. When vitiated, it becomes a causative factor for multiple diseases. Among the methods of Raktamokshana (bloodletting), Siravyadha (venesection) is regarded as Chikitsardha half of all therapeutic measures due to its extensive therapeutic applications.

### Methods

This review critically analyzed classical Ayurvedic texts (Brihatrayi and Laghutrayi) along with contemporary literature to explore the principles, procedure, indications, contraindications, and clinical relevance of Siravyadha. The procedural framework was studied in three stages: Puroakarma (pre-operative), Pradhana karma (operative), and Paschat karma (post-operative). Safety measures, instruments, and complication management strategies were also compiled from both traditional and modern perspectives.

### Results

Siravyadha is indicated in conditions such as Visarpa, Vidradhi, Kushtha, Vatarakta, Raktapitta, and musculoskeletal and vascular disorders. The procedure, when performed systematically, alleviates symptoms of vitiated blood, restores physiological balance, and provides symptomatic relief. Complications like haemorrhage, fainting, and rakta kshaya may occur if performed incorrectly; however, classical measures such as skandana, sandhana, and dahana offer effective management.

### Conclusion

Siravyadha exemplifies a scientifically grounded and clinically useful para-surgical procedure in Ayurveda. Its strong classical foundation, therapeutic outcomes, and similarity with modern venesection highlight its continuing relevance. Integrating Siravyadha into present-day healthcare may enhance management of rakta-prakopaja disorders while preserving a safe, time-tested therapeutic approach.

## INTRODUCTION

**Rakta:** The term *Rakta* originates from the root word *Raja Ranjane*, which signifies its characteristic red colour and inherent staining property. (1) Synonyms of *Rakta* are *Rudhira*, *Shonita*, *Kshataja*, *Asrik*, *Lohita*. (2)

*Acharya Sushruta* have stated that “*Dehashya Rudhiram Mulam Rudhireneva Dharyte*” meaning *Rakta* is the root and sustaining factor of the body. Hence, Blood is life and every effort should be made to protect it. (3) *Rasa* reaches *yakrita* and *pleeha* and takes the form of *Rakta*. (4) *Rasa* is the pure essence of food, which gets processed with *ranjaka pitta* gets transformed into *rakta*. (4)

*Rakta* is considered *panchabhoutika* in nature, being composed of all five elements. Its qualities are described as *visrata* (diffusibility), *dravata* (fluidity), *raga* (imparting color), *spandana* (pulsation), and *laghuta* (lightness). (5) The natural colour of *Rakta* is red, resembling that of *Indragopa* insect or *Gunja phala*. (6)

Although *Rakta Dhatu* is composed of all five *Mahabhutas*, it is predominantly governed by *Tejas* and *Jala Mahabhutas*. Its total quantity is considered to be 8 *Anjali*. (7) The *Upadhatus* (subsidiary tissues) of *Rakta* are the *Sira* (veins) and *Kandara* (tendons/ligaments), (8) while *Pitta* is regarded as the *Mala* (waste product) of *Rakta Dhatu*. (9)



*Rakta*, when vitiated, can act as a causative factor for various diseases. Hence, *Acharya Sushruta*, who regarded *Rakta* as the fourth *dosha*, (10) emphasized different methods of *Raktamokshana* (bloodletting) to eliminate its vitiation. By

doing so, *Rakta* is restored to its natural state, functioning as the “supporter of life” rather than turning into a “destroyer of life” through the manifestation of disorders. (10)

**Characteristics of vitiated (*dushta*) *Rakta*: (11)**

Type of <i>Dushta Rakta</i>	Characteristics
<i>Vata dushta Rakta</i>	Foamy ( <i>phenil</i> ), reddish ( <i>aruna varna</i> ), blackish ( <i>krishna</i> ), rough ( <i>parusha</i> ), thin ( <i>tanu</i> ), moves quickly ( <i>shighra gami</i> ), lacks consistency ( <i>askandi</i> ).
<i>Pitta dushta Rakta</i>	Bluish ( <i>nila</i> ), yellowish ( <i>pita</i> ), greenish ( <i>harita</i> ), dark ( <i>shyava</i> ), foul-smelling ( <i>aam gandhi</i> ), disliked by ants and flies ( <i>pipillika, makshika apriya</i> ), unstable ( <i>askandi</i> ).
<i>Kapha dushta Rakta</i>	Resembles red ochre ( <i>raktagairika</i> -like), unctuous ( <i>snigdha</i> ), cold ( <i>shitata</i> ), thick ( <i>bahala</i> ), slimy ( <i>picchila</i> ), oozes slowly ( <i>cirasravi</i> ), flesh-like appearance ( <i>mamsapeshi sadrisa</i> ).
<i>Tridoshaja Rakta</i>	Shows features of all three <i>doshas</i> , sour-gruel-like ( <i>kanji-sadrisha</i> ), foul smelling.
<i>Dvidoshaja Rakta</i>	Exhibits features of two <i>doshas</i> combined.

*Raktamokshana* (Bloodletting) is a procedure by which the vitiated *Rakta* (blood) is removed by several procedures (either

by using sharp surgical instruments or by means of parasurgical measures) in disease caused by *Rakta* or *Pitta*. (12)

<i>Raktamokshana</i>					
<i>Sashastra</i> (13) (Using sharp surgical instruments)			<i>Nisashastra</i> (14) (Without using surgical instruments)		
<i>Siravyadha</i>	<i>Pracchanna</i>	<i>Jaluka</i>	<i>Shringa</i>	<i>Ghati</i>	<i>Alabu</i>
For deeply situated <i>doshas</i> , <i>Rakta</i> vitiated all over the body	For superficially situated vitiated <i>Rakta</i> or when <i>rakta</i> is clumped	<i>Rakta</i> vitiated with <i>pitta</i>	<i>Rakta</i> vitiated with <i>vata</i>	When vitiated <i>Rakta</i> is in skin	<i>Rakta</i> vitiated with <i>Kapha</i>

***Siravyadha* (Venepuncture):** The therapeutic act of puncturing a vein to expel blood is termed *Siravyadha*. It is specifically indicated in *Rakta-prakopaja vyadhis* (diseases arising from aggravated blood), particularly in conditions that fail to respond to measures such as *sheeta* (cold), *snigdha* (unctuous), *ruksha* (dry), or *ushna* (hot) therapies, and which, though otherwise curable, remain unresolved. It is regarded as “*Chikitsardha*”, meaning half of all therapeutic measures in the management of diseases within *Shalyatantra*, similar to how properly administered *Basti Chikitsa* is considered half of the total therapeutic procedures in *Kayachikitsa*. (15)

**Aim**

To comprehensively review the classical foundations, procedural details, clinical applications, and modern scientific perspectives of *Siravyadha* (venesection) in order to highlight its relevance and therapeutic potential in contemporary healthcare.

**Objectives**

- To explore the description of *Siravyadha* in *Brihatrayi* and *Laghutrayi*, with emphasis on its definition, indications, contraindications, and procedural details.
- To present a detailed account of the steps of *Siravyadha*—*purva karma, pradhana karma*, and *paschat karma*, along with instruments and safety measures mentioned in *Ayurveda*.
- To review the role of *Siravyadha* in managing *Rakta-prakopaja vyadhis*, skin disorders, musculoskeletal conditions, vascular diseases, and other relevant clinical entities.
- To identify possible risks, contraindications, and complication management strategies from both classical and modern viewpoints.

**Indications and Contraindications of *Siravyadha*:**

Indications (16)	Contraindications (17)
<i>Visarpa, Vidradhi, Pleeha, Gulma, Agnimandya, Jwara, Mukharoga, Netra roga, Shiroroga, Mada, Trishna, Lavana asyata</i> (Salty taste in mouth), <i>Kushtha, Vatarakta, Raktapitta, Katuamla udgara</i> and <i>Bhrama</i> .	<i>Sarvanga shopha</i> (generalised edema), <i>Kshina</i> (emaciated due to excessive intake of sour food), <i>Pandu</i> (Anemia), <i>Arsha</i> (Piles), <i>Udara roga</i> (Abdominal enlargement), Pregnancy, In children, aged, emaciated due to trauma to chest, cowards, exhausted, alcoholic, Who has undergone <i>shodhana, Kasa</i> (Cough), <i>Jwara</i> (Fever), <i>Bhiru, Parishranta, kliba, Krishna, Akshepak, Pakshaghata, Upvasita, Pipasa</i>



**Ideal time for *Siravyadha*:**

*Siravyadha* is advised to be performed in moderate seasons, avoiding periods of extreme heat or cold. It should not be performed in a patient who has undergone excessive *svedana* (sudation) or who has been overexposed to the sun. The procedure is ideally carried out after the person has been adequately nourished with *Yavagu* (thin gruel). *Siravyadha* should never be done in a healthy individual. (18)

**Ideal procedure of *Siravyadha*: (19)**

For performing *Siravyadha*, veins suitable for puncture should be carefully chosen, stabilized, and made prominent by applying a tourniquet above the site before pricking. Although there are certain contraindications for this procedure, in situations such as poisoning or medical emergencies, *Siravyadha* may still be undertaken when necessary.

**Purvakarma**

- The patient should first undergo *snehana* (oleation) and *swedana* (sudation).
- A diet opposite to the aggravated *dosha* is advised, preferably light and liquid preparations such as *yavagu* (thin gruel).
- At the appropriate time, the patient is positioned either sitting or standing, depending on comfort and suitability for the procedure.
- A tourniquet made of cloth, leather, soft bark, creeper, or any suitable material is tied above the chosen site, ensuring it is neither too tight nor too loose.
- Finally, *Siravyadha* (venepuncture) is carried out with the proper instrument.

**Pradhana Karma**

- The selected vein is punctured with a suitable instrument.
- Blood flows out in a continuous stream for some time and then ceases either spontaneously or upon checking (usually after one *muhurta*).
- Just as the puncture of *kusumbha* flowers first releases a yellowish sap, in humans too, the initial flow from punctured veins is the vitiated blood.
- In individuals who are unconscious, extremely frightened, exhausted, or excessively thirsty (in shock), the required quantity of blood may not flow out.
- Inadequate blood flow also occurs when veins are neither engorged nor properly stabilized before puncture.
- If excessive *dosha* is present or if the patient loses consciousness during the procedure, *Siravyadha* should be stopped and may be resumed later either the same afternoon, the next day, or after three days.
- Complete removal of vitiated blood is not advised; it must be monitored carefully, as excessive elimination can lead to *rakta kshaya* (depletion of blood).
- Any remaining vitiated *dosha* should then be addressed through alternative therapeutic measures.

**The Maximum quantity of blood that can be withdrawn: (20)**

In adults with strong vitiated *doshas* and good physical strength, the upper limit of bloodletting is one *prastha*, equivalent to about thirteen and a half *pala*, which is approximately 640 ml.

<b><i>Dushta vyadha</i> (21)</b>	
<b><i>Durviddha</i></b>	<b><i>Atividhha</i></b>
When puncture is done with instruments smaller than appropriate, blood may not appear or comes out only in minimal quantity. In some cases, blood may flow out accompanied by pain and swelling	When larger instruments are used for puncturing, signs of excessive bleeding may occur. <b><i>Kunchita viddha</i></b> : If the vein is pierced irregularly. <b><i>Picchita viddha</i></b> : Repeated attempts with blunt instruments cause the vein to become flattened and crushed. <b><i>Kuttita</i></b> : Repeated puncturing of non-engorged veins can lead to tearing or damage. <b><i>Aprasrta viddha</i></b> : When blood fails to flow from a punctured vein due to fear, unconsciousness, or extreme cold. <b><i>Atyudeerna viddha</i></b> : Excessive bleeding due to the puncture of veins with very sharp or large-tipped instruments. <b><i>Kunita viddha</i></b> : In emaciated individuals, the blood flow is minimal, and veins appear as if filled with air. <b><i>Vepita viddha</i></b> : When a tourniquet is improperly tied and veins are not well secured, puncturing results in only a small amount of blood discharge. <b><i>Anutittha viddha</i></b> : Puncturing an unengorged vein produces very scanty flow. <b><i>Shastrahata</i></b> : If vein is completely severed, it leads to excessive blood loss and dysfunction of the affected part. <b><i>Aviddha</i></b> : Using inferior or blunt instruments may not puncture the vein but only injure it, leading to inadequate blood flow. <b><i>Avyadha</i></b> : Refers to conditions where venepuncture is contraindicated. <b><i>Vidruta viddha</i></b> : Puncturing a vein without proper stabilization causes improper.

**Paschat Karma**

- After the blood stops flowing, the area is bandaged and kept elevated for some time.
- Once his vitals are normal, patient can be discharged from hospital.
- He should then avoid anger, exertion, cohabitation, daysleep, excessive speech, exercise, travelling in vehicles, studying, standing, sitting, walking, exposure to cold, wind; incompatible foods, unsuitable foods, having food during indigestion etc, at least for a period of one month.



**Ideal procedure of Siravyadha: (16)**

When blood has oozed out and ceases to flow on its own, then it should be understood that the procedure has been carried out correctly. The following signs should appear:

- Lightness in the body and freedom from the signs and symptoms of vitiated Rakta.

- Cessation of pain/discomfort (vedana shanti).
- Reduction in severity of disease.
- Happiness or a state of cheerfulness (happiness because of reduction in pain/ disease condition).

**Site of Siravyadha according to the disease: (22)**

S. No.	Site of Puncture	Diseases treated
1.	Vein 2 <i>angula</i> above <i>kshipra marma</i> , punctured with <i>vrihimuka shastra</i>	<i>Padadaha, padaharsha, chippa, visarpa, vataraka, vatakantaka, vicharchika, padadari</i>
2.	1. Vein 4 <i>angula</i> above ankle 2. Vein 4 <i>angula</i> below ankle 3. Vein over great toe	<i>Vataja Shlipada Pittaja Shlipada Kaphaja Shlipada</i>
3.	In leg – 4 <i>angula</i> above ankle	<i>Kroshtuka shirsa, Khanja, Pangu and other painful conditions of vata</i>
4.	Vein 2 <i>angula</i> below <i>indrabasti marma</i>	<i>Apachi</i>
5.	Vein 4 <i>angula</i> above or below knee ( <i>Janu sandhi</i> )	<i>Gridhrasi</i>
6.	Vein at the <i>urumoola</i> (base/root of thigh)	<i>Galaganda</i>
7.	Vein in left arm, in the middle of arm or inner side of elbow or vein between ring and little finger (left hand)	<i>Plihodara</i>
8.	Vein in the middle of right arm or inner side of elbow or vein between ring and little finger (right hand)	<i>Yakruddalyudara, Kaphodara, Kasa, Shwasa</i>
9.	Vein 4 <i>angula</i> above or below elbow	<i>Vishwachi</i>
10.	Veins around hip, at 2 <i>angula</i> distance	<i>Pravahika (with pain)</i>
11.	Vein in the middle of penis	<i>Parivartika, Updamsha, Shuka dosha, Diseases of shukra</i>
12.	Veins on the sides of testes	<i>Mutra vridhi</i>
13.	Vein below umbilicus, 4 <i>angula</i> to left of median raphae	<i>Dakodara</i>
14.	Vein between axilla and breast, on the left side	<i>Antravidhi, Parshva shoola</i>
15.	Veins between shoulder	<i>Bahudosha, Avabahuka</i>
16.	Vein in the middle of <i>trik sandhi</i>	<i>Tritiyaka jwara</i>
17.	Vein below shoulder joint, on either side	<i>Chaturtaka jwara</i>
18.	Vein over temperomandibular joint ( <i>Hanu sandhi</i> )	<i>Apasmara</i>
19.	Veins situated at junction of temple region and hair line, or veins in chest, outer canthus of eye ( <i>apanga</i> ) or forehead ( <i>lalata</i> )	<i>Unmada</i>
20.	Veins below tongue	<i>Jihwaroga, Danta roga</i>
21.	Veins over palate	<i>Talu roga</i>
22.	Veins above/ around ears	<i>Karna shola, Karna roga</i>
23.	Veins at tip of nose	<i>Gandha agrahana, Nasaroga</i>
24.	Veins around nose, forehead, outer canthus of eye	<i>Timira, Akshipaka</i>
25.	Veins around nose, forehead, outer canthus of eye	<i>Adhimantha, Shiro roga</i>

**Importance of Raktamokshana done routinely: (16)**

People who undergo timely *raktamokshana* do not suffer from:

- *Twakdosha* (Skin disorders)
- *Granthi*
- *Shopha* (Inflammatory or non-inflammatory swellings)
- Diseases caused by vitiated *rakta*

**Complications: (13)**

During *Siravyadha*, if there is excessive bleeding, it may lead to complications such as headache, temporary blindness or darkness before the eyes (*andhya*), glaucoma and other visual disorders, depletion of vital strength (*dhatu kshaya*),

convulsions (*akshepaka*), burning sensations, hemiplegia (*pakshaghata*), localized diseases, hiccups, cough, breathlessness, anemia, and in severe cases, even death (resembling features of hemorrhagic shock).

These adverse effects are more likely to occur when the procedure is performed on a very hot day, after excessive sweating, or when the puncture is made too wide.

**Management of excessive haemorrhage during Siravyadha: (23)**

Hemorrhage needs to be managed by four main methods:

1. *Sandhana*- Unification
2. *Skandana*- Coagulation



3. Pachana- Suppuration
4. Dahana- Cauterisation

To control bleeding, *skandana* is applied first, followed by *sandhana* and then *pachana* measures. If all three methods prove ineffective, *dahana* is employed as the final step to stop haemorrhage.

Astringent (*kashaya rasa*) drugs are applied in the form of *lepa* or *parisheka* to aid tissue union. *Hima* (cold applications) help in coagulation, *bhasma* used as a dusting powder supports *pachana*, and *agnikarma* (cauterization) causes vein contraction, thereby assisting in arresting haemorrhage.

To stop bleeding, powders of *Madhuka*, *Priyangu*, *Gairika*, *Sarja*, *Arjuna*, *Laksha*, and similar drugs may be applied at the site of haemorrhage along with pressure.

Tight bandaging also helps in controlling the flow, while *kshara karma* serves as another effective measure to arrest haemorrhage.

## CONCLUSION

Siravyadha, regarded as *chikitsardha* in Ayurveda, offers a systematic and safe approach for managing a wide range of *rakta-prakopaja* and related disorders. Its classical foundation, clinical utility, and parallels with modern venesection highlight its enduring therapeutic relevance and potential for integration into contemporary healthcare.

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