

DECODING PERIPHERAL VASCULAR DISEASE: INSIGHTS FROM AYURVEDIC PERSPECTIVES AND THERAPEUTIC APPROACHES

Dr. Amrutha Jayan^{*1}, Dr. Jai Singh Yadav², Dr. Mahesh Kumar³

¹M.D. Swasthavritta, Thrissur, Kerala.

²Associate Professor, P.G Department of Swasthavritta, Chaudhary Brahma Prakash
Ayurveda Charak Sansthan, New Delhi.

³Associate Professor, Department of Shalyatantra, Chaudhary Brahma Prakash Ayurveda
Charak Sansthan, New Delhi.

Article Received on 27 May 2026,
Article Revised on 17 June 2026,
Article Published on 01 July 2026,
<https://doi.org/10.5281/zenodo.21022722>

*Corresponding Author

Dr. Amrutha Jayan

Chaudhary Brahm Prakash Ayurved
Charak Sansthan, Delhi, India.



How to cite this Article: Dr. Amrutha Jayan^{*1},
Dr. Jai Singh Yadav², Dr. Mahesh Kumar³
(2026). Decoding Peripheral Vascular Disease:
Insights From Ayurvedic Perspectives And
Therapeutic Approaches. World Journal of
Pharmaceutical Research, 15(13), 142–152.
This work is licensed under Creative Commons
Attribution 4.0 International license.

ABSTRACT

Introduction: In this modern era, Peripheral Vascular Diseases (PVDs) have become very common due to the deranged lifestyle like unhealthy dietary practices, sedentary lifestyle and various mental factors like stress etc. Among the PVDs, Buerger's disease, Atherosclerosis, Raynaud's phenomenon, Varicose veins, and Deep Vein Thrombosis (DVT) hamper the blood circulation in limbs leading to various health consequences. The view of these diseases in Ayurvedic perspective shows vitiation of *Vata* and *Rakta* doshas and can be correlated to the conditions like *Vatarakta*, *Rakta Avrita Vata*, and *Siragata Vata*. **Materials and Methods:** This article explores PVD through the lens of Ayurveda and the preventive, promotive as well as therapeutic approaches based on classical Ayurvedic texts such as the *Charaka Samhita*, *Sushruta*

Samhita, and *Ashtanga Hridaya* in align with modern medicine insights. **Results:** Key Ayurvedic interventions discussed here include *Nidana Parivarjana* (avoiding causative factors), *Samshamana* (palliative measures), *Samshodhana* (cleansing therapies), *Raktamokshana* (blood-letting), *Bahirparimarjana* (external therapies), *Adravyabhoota Chikitsa* (non-pharmacological therapies), *Rasayana* (rejuvenation) and Yoga. Unlike conventional medicine, which uses medications, surgery and lifestyle corrections, Ayurveda offers a unique holistic approach through detoxification, improvising circulation, the non

obstruction of subtle channels (*srotas*) in body and personalized care. **Conclusion:** The integrative way of approach adopted here aims at overcoming the root causes of vascular diseases along with maintenance of long-term vascular health. At the same time, it complements modern methods of treatment for better results.

KEYWORDS: Arterial diseases, Peripheral Vascular Disease, PVD, *Siragranthi*, *Vatarakta*, Venous diseases.

BACKGROUND

Peripheral Arterial Disease (PAD) mostly develops after the age of forties, and the highest incidence occurs among those in sixties and seventies. It affects approximately 10–15% of the population and the prevalence is more in individuals having risk factors like diabetes, hypertension, dyslipidemia or a history of smoking.^[1] Peripheral Vascular Diseases (PVD) constitutes a wide range of conditions which include the morbidities in arteries, veins, and lymphatic vessels, mostly of the lower limbs.^[2] The peripheral signs of PVD include pain, pallor, pulse, paraesthesia, and paralysis (5P). Atherosclerosis affects the smaller arteries mostly which results in restricted blood flow and ischemic symptoms such as intermittent claudication, diminished pulses, cold extremities, rest pain, skin discoloration, and chronic ulcers.^[2,3] Arterial disorders comprises of PAD, Buerger's disease, and Raynaud's phenomenon. These arise from inflamed vessels or the vessels whose lumen has become narrow and it affects the femoral and tibial arteries.^[3] Venous morbidities like Deep Vein Thrombosis (DVT) and Varicose veins hinder the blood return,^[4] whereas dysfunction of lymphatic system causes persistent swelling in limbs.^[5] Conventional medical treatment for PVD involves lifestyle amendments like cessation of smoking and increased physical activities in combination with medications including antiplatelets, vasodilators, statins and anticoagulants.^[6,7] In advanced cases, interventions like angioplasty, vein ablation and bypass surgery are done. Venous insufficiency is managed by Compression therapy.^[8] In Ayurveda, PVD may be correlated to diseases like *Vatarakta*,^[9] *Raktavarta Vata*, *Sira kautilya*, and *Siragranthi* which is caused due to blockage in the *Raktavaha Srotas*^[10] (blood-carrying channels) and arise from vitiation of *Vata*, *Rakta*, *Kapha*, or *Meda doshas*. Arterial PVD, which occurs due to *Kapha-Meda Aavrita Vata* presents with symptoms like pallor, pain, and cold limbs. Venous disorders, presented with symptoms like swelling and discoloration, resemble conditions like *Uttana Vatarakta* and *Sira Kutilata*,^[11] which describe vessel deformities and obstruction. According to Ayurveda, various factors like poor dietary habits, sedentary lifestyle, stress and other emotional factors, smoking lead to dosha vitiation and

affects circulation.^[12] The concept of *Rakta Aavruta Vata* in Ayurveda gives insight about pain and functional derangement caused due to the obstruction of blood.^[13] Diseases like *Vatarakta*, *Sira Granthi*, and *Aavaranajanya Vata* gives an in-depth understanding of the underlying cause of PVD from an Ayurvedic perspective.^[14] This article emphasizes the role of Ayurveda in providing holistic approach towards vascular pathologies. It stresses on preventive care, lifestyle modification and other therapies which focuses on improving the flow of blood, reducing the symptoms and improving overall health. Moreover, it integrates Ayurvedic wisdom with modern medicine to promote more comprehensive and cheaper way of treatment.

Ayurvedic aspect of Sira Vikara & Dhamani Vikara

In Ayurveda, venous pathology (*Sira Vikara*) and arterial pathology (*Dhamani Vikara*) are considered as major disorders in the channels concerned with circulation of blood (*Raktavaha Srotas*). As per classical Ayurvedic literature, *Siras* are non-pulsating vessels which transport *Rakta* (blood), while *Dhamanis* are pulsatile and helps in the mobility of *Rasa*, *Rakta*, and *Prana* all over the body.^[15] The *Siras*, when afflicted with vitiated *Vata* and *Rakta* doshas leads to symptoms like *Siragranthi* (vein swelling) and *Sira aakunchana* (vascular spasm)^[16] A peculiar condition, called *Kutila Sira* characterized by firm nodular and painful veins which aligns with chronic vascular stiffness is also described.^[17] In case of arterial disorders, vitiation of *Vata* and *Kapha* doshas leads to *Dhamani* morbidities, such as *Dhamani Praticchaya* (arterial thickening), *Dhamanigata Vata* (*vata* affecting arteries), and *Vivrita Dhamani* (arterial dilation or aneurysm).^[18] Additionally, *Charaka* notes that disruptions in the *Raktavaha Srotas* may depict symptoms like localized swelling, abnormal pulsation and discoloration of skin.^[19] These clinical manifestations resemble with vascular pathologies like arteriosclerosis, varicose vein, vasculitis like inflammatory conditions in modern medical science. Thus, Ayurvedic insights paves a way to offer meaningful correlations with vascular pathology in modern medicine.

Modern aspect of Peripheral Vascular Diseases

Peripheral Vascular Disease (PVD) arises due to the blockage of arteries that supply blood to the limbs. It occurs mostly due to atherosclerosis, which occurs due to the building up of plaques in the arterial walls. This ultimately leads to reduction in blood flow, presenting with symptoms such as pain, cramps and coldness in the limbs. The basic classification and clinical manifestation of PVD in modern science is illustrated in Table number 1. Although a

wide range of medicines and surgical management, lifestyle changes, angioplasty etc. are available, the major challenge is achieving long term recovery and promising results. Hence, there is a need for broad based integrative approach that helps in symptomatic relief as well as promotes circulatory well-being through lifestyle management, prevention and personalized care.

Table Number 1: PVD as per Modern aspect.

Sl. No.	Arterial Disorders ^[20]	Venous Disorders ^[21]
1	Atherosclerosis (Peripheral Arterial Disease – PAD)	Varicose veins
2	Thromboangiitis obliterans (TAO, Buerger's disease)	Chronic venous insufficiency
3	Raynaud's disease or phenomenon	Deep vein thrombosis (DVT)
4	Arterial embolism	Phlebitis (superficial/deep)
5	Arteriosclerosis obliterans	Post-thrombotic syndrome
6	Acute arterial occlusion / thrombosis	Venous ulcers

METHODOLOGY

The information segregated here is a collection from the available Ayurvedic literature, including the classical texts, research articles available in renowned journals, and these sources are known to give promising results.

Ayurvedic Management of Peripheral Vascular Disease (PVD)

Ayurveda, with its rich therapeutic heritage, offers a wide range of treatment possibilities for PVD. Several experienced practitioners have successfully managed PVD using Ayurvedic principles, achieving encouraging clinical outcomes. The Ayurvedic approach primarily aims to purify the blood, restore proper circulation, and clear blockages in the peripheral vessels. The management protocol involves multiple strategies, as outlined below.

- 1. Chikitsa Sutra (Treatment Framework):** This includes key therapeutic goals such as *Raktashodhana* (blood purification), *Srotoshodhana* (clearing obstructed bodily channels), promoting *Samyak Rakta Samvahana* (healthy blood flow), and reducing the overload in the vascular system.
- 2. Nidana Parivarjana (Avoidance of Causative Factors):** The foundation of Ayurvedic treatment begins with eliminating the root causes. This involves avoiding certain foods like *Amla* (sour), *Lavana* (salty), *Guru* (heavy), and *Abhishyandi Ahara* (clogging foods), as well as unhealthy lifestyle habits such as *Divaswapna* (daytime sleeping), *Vegadharana* (suppressing natural urges), and excessive indulgence (*Maithuna*).

Supportive daily routines like *Padabhyanga* (foot massage), *Dinacharya* (daily regimen), and *Ritucharya* (seasonal regimen) are also recommended.^[22]

3. **Samshamana Chikitsa (Palliative Treatment):** This approach includes the use of specific herbs and classical formulations (refer table number 2). Single herbs like *Guggulu* (anti-atherogenic properties), *Chitraka* and *Arka* (anticoagulants), and *Manjishta* (blood purifier and haemostatic) are particularly beneficial in the management of PVD.^[23]

Table number 2: Samshaman Aushadi for PVD.^[24]

Condition	Kashayam	Gulika / Vati	Churnam	Grtam / Lehyam	Arishta / Asava	Other
Buerger's Disease	<i>Sahacharadh</i> , <i>iGuggulu Tiktaka</i> , <i>Aragwadhadi</i> , <i>Mahamanjishtadi</i> ,	<i>Kaishora Guggulu</i> , <i>Shaddharana Vati</i>	<i>Shaddharana</i> , <i>Yogaraja</i> , <i>Guggulu</i> <i>Panchapala</i>	<i>Guggulu</i> <i>Tiktaka</i> <i>Grtam</i> , <i>Tiktaka</i> <i>Grtam</i> ,	<i>Arjunarishtam</i> , <i>Aragwada</i> <i>Arishtam</i> , <i>Usheerasavam</i>	Papaverin- Peripheral vasodilator
Raynaud's Disease	<i>Guduchyadi</i> , <i>Panchamruta</i> , <i>Mahamanjishtadi</i> ,	<i>Kaishora &</i> <i>Triphala Guggulu</i>	<i>Sudarshana</i> <i>Churnam</i>	<i>Chyavanapr</i> <i>asham</i> , <i>Trivrit</i> <i>Lehyam</i>	—	—
Varicose Veins	<i>Punarnavadi</i> <i>Manjishtadhi</i> , <i>Sahacharadhi</i> , <i>Chiruvilwadi</i>	<i>Triphala Guggulu</i> , <i>Siva Guggulu</i> , <i>Chandraprabha</i> <i>Vati</i>	—	—	<i>Arjunarishtam</i> , <i>Khadirarishtam</i> , <i>Aravindasavam</i>	<i>Sahacharad</i> <i>hi Tailam</i>
Deep Vein Thrombosis (DVT)	<i>Aragwadhadi</i> , <i>Guggulu Tiktaka</i> , <i>Sahacharadhi</i> , <i>Manjishtadi</i>	<i>Triphala Guggulu</i> , <i>Shaddharana Vati</i>	<i>Shaddharana</i> , <i>Sudarshana</i> , <i>Guggulu</i> <i>Panchapala</i>	<i>Dasamoola</i> <i>Haritaki</i> <i>Lehya</i> , <i>Brahma</i> <i>Rasayana</i>	<i>Arjunarishtam</i> , <i>Dasamoolarishtam</i>	—

4. **Samshodhana Chikitsa:** *Virechana* is preferred in Rakta and Pitta disorders, while *Basti* is crucial in *Shakhagata Vata* disorders like PVD. *Gomutra Vasti* and *Ksheera Vasti* are useful to relieve vascular blockages and improve limb circulation.^[25]

5. **Raktamokshana (bloodletting):** *Roga shonita jata* is to be treated by *raktamokshana* as suggested by Acharya Sushruta.^[26] Most PVD are correlated with *Raktapitta* disorders, wherein *Raktamokshana* is indicated as a therapeutic option. Among these, *Jalaukavacharana* (leech therapy) is especially effective as it removes *dushta rakta*, alleviates pain and inflammation, and promotes wound healing. The bioactive compound Hirudin, present in leech saliva, acts as a natural anticoagulant, thereby preventing clot formation, improving microcirculation, reducing inflammation, and relieving venous congestion. *Siravyadha*, *Alabu*, and *Prachanam* are also indicated in localized stagnation and congestion.^[27]

6. Bahirparimarjana Chikitsa (Local hygiene and external therapy): External therapies like *Abhyanga* (oil massage), especially *padaabhyanga*, by virtue of its property of prevention of *sankocha of sira and snayu*.^[28] *Udwarthana* (by *Kapha meda vilayana* property, will remove the atherosclerotic plaques).^[29] *Lepa*, and *Parisheka* with oils such as *Sahacharadi taila*, *Murivenna*, and *Jatyadi ghrita* help alleviate symptoms like edema and skin discoloration.^[30] The *Dashang lepa* helpful in reducing the cellulitis like features caused by PVD.

7. Adravyabhoota Chikitsa (non-pharmacological treatment): non-drug measures like walking, swimming, elevation of limbs, and use of elastic bandages improve venous return.^[31]

8. Rasayana Chikitsa: By its *srotoshodana* and *margaavarana hara* properties, *Shilajatu*, *Pippali Vardhamana*, and *Brahma Rasayana* rejuvenate the circulatory system and prevent recurrence.^[32]

9. Padabhyanga (Foot Care): Regular cleaning, moisturization, nail care, and wearing proper footwear are essential. Smoking cessation is mandatory.^[33] In DVT, the patient should flex and extend the ankle about 10 times every 30 minutes. Wearing elastic stockings helps in blood flow. The foot may be raised 6 inches to prevent the thrombus from enlarging during sleep. Compression bandages are useful. Avoid long-standing posture. Keeping the leg in an elevated posture can prevent varicose ulcers.

10. Yogasanas: Postures such as *Sarvangasana*, *Uttanapadasana*, and *Ardha Halasana* promote venous return and prevent blood pooling in the lower limbs.^[34]

11. Pathya- Apathya: The suggested *Pathya* (Do's) and *Apathya* (Don't's) for PVD are mentioned in below Table number 3.

Table number 3: Pathya & Apathya for PVD.

Category	Pathya (Wholesome – Supports Rakta Shuddhi)	Apathya (Unwholesome – Vitiates Rakta)
Grains & Cereals	Oats, Barley, Brown rice, Quinoa, Whole wheat bread, Millets (foxtail, little millet)	Refined flour (<i>Maida</i>), White bread, Instant noodles, Pizza base, Bakery items
Pulses & Proteins	Green gram (<i>Mung</i> beans), Lentils, Soybeans, Sprouts	Red meat, Processed meats (sausages etc.), Excess eggs, Deep-fried pulses
Vegetables	Cucumbers, Bottle gourd, Ridge gourd, Bitter gourd, Broccoli, Carrots, Beets (moderate), Pumpkin	Spicy curries, Pickled vegetables, Deep-fried potato chips, Excess onions & garlic
Fruits	Pomegranate, Grapes, Apples, Pears, Watermelon, Papaya, Oranges, Blueberries, Strawberries, Kiwi	Excess sour fruits (tamarind, raw mango), Canned fruit with sugar syrup, Overripe bananas
Dairy & Alternatives	Cow's milk, Buttermilk, Almond milk, Coconut water	Flavored milkshakes, Cheese (processed), Ice cream, Fermented yoghurt with sugar,

		Curd
Fats & Oils	Cow's ghee, Olive oil, Flaxseed oil, Avocado (moderate), Nuts (almonds, walnuts, cashews in moderation)	Refined oils, Hydrogenated fats, Deep-fried fast foods
Drinks	Herbal teas (mint, coriander, fennel, hibiscus), Lemon water, Fresh fruit juices (pomegranate etc), Plenty of plain water	Alcohol, Beer, Wine, Soft drinks, Cola, Energy drinks, Excess tea/coffee, Cold water
Sweets & Snacks	Dates, Dry fruits (figs, raisins), Homemade energy bars	Refined sugar, Chocolates, Cakes, Pastries, Biscuits, Candy
Lifestyle (Vihara)	Yoga, Meditation, Morning walks, Hydration reminders, Cooling pranayama (Sheetali, Anulom -Vilom), Screen-time breaks, Balanced work–rest	Late night parties, Sleep deprivation, Smoking, Alcohol intake, Junk food, Anger/stress, Excessive gym workouts, Sun exposure, Day sleep

DISCUSSION

Peripheral Vascular Disease is not merely a localized circulatory disorder but a reflection of broader systemic vascular dysfunction. This highlights the importance of preserving vascular health through preventive care and long-term management, rather than focusing solely on symptom relief.^[35] Ayurveda provides a comprehensive and individualized approach, emphasizing the interconnectedness of body and mind. From the diagnostic stage, emotional factors like anger (*krodha*), grief (*shoka*), and fear (*bhaya*) are acknowledged as key contributors to disease progression.^[36] In Ayurvedic terms, PVD is closely aligned with conditions such as *Vatarakta* or *Rakta-avrita Vata*, where vitiated *Rakta* (blood) obstructs the normal movement of *Vata dosha*, particularly affecting the extremities.^[37] Treatment strategies in Ayurveda aim to cleanse the blood (*Raktashodhana*) and open the body's blocked channels (*Srotoshodhana*), using classical herbs like *Guggulu*, *Manjishta*, *Sariva*, and *Shilajatu*, known for their anti-inflammatory and circulatory-enhancing properties.^[38] The Ayurvedic management of PVD is built upon several interrelated principles aimed at addressing both the root causes and symptoms of the condition. ***Nidana Parivarjana***, or the elimination of causative factors, serves as the foundational step, emphasizing the avoidance of unhealthy foods (*Apathya ahara*) and lifestyle practices (*vihara*), while encouraging the adoption of beneficial dietary and daily routines (*pathya ahara and vihara*).^[39] ***Shamana Chikitsa*** involves the use of herbal preparations—such as decoctions, powders, and pastes—to pacify the vitiated *doshas* and relieve symptoms. For deeper, chronic, or obstructive conditions,^[40] ***Shodhana Chikitsa*** offers purificatory therapies like *Virechana* (purgation) and *Vasti* (medicated enemas) to cleanse the system.^[41] ***Bahirparimarjana Chikitsa***, which includes external therapies such as *Abhyanga* (oil massage), *Udwarthana* (powder massage), and *Parisheka* (medicated pouring), enhances peripheral circulation and reduces stiffness and

swelling. In cases resembling vascular blockage or inflammation,^[42] **Raktamokshana** (bloodletting), through techniques like *Siravyadha* (venesection) or *Jalaukavacharana* (leech therapy), is highly recommended.^[43] Additionally, **Adravayabhoota Chikitsa**, involving non-pharmacological interventions such as yoga, swimming, and physical activity, supports cardiovascular health.^[44] Finally, **Rasayana therapy** focuses on tissue rejuvenation and vascular strengthening, aiming to prevent recurrence and maintain long-term vascular integrity. Together, this integrative Ayurvedic approach—centered on purification, rejuvenation, and lifestyle correction—offers a holistic and sustainable method for effectively managing PVD and slowing its progression.

CONCLUSION

Peripheral Vascular Disease represents more than a disruption in blood flow—it underscores the importance of reevaluating our health choices and lifestyle patterns. While modern medicine offers precise and effective treatments, Ayurveda presents a comprehensive, individualized approach that targets the root causes through detoxification, lifestyle adjustments, and restorative therapies. Ayurvedic care focuses on purifying the blood, removing blockages in the body's channels, improving circulation, and restoring balance among the *doshas* elements that can meaningfully complement conventional treatments. By integrating Ayurvedic wisdom with modern clinical methods, healthcare providers can not only improve therapeutic outcomes but also emphasize prevention and raise public awareness through education. This integrative model supports a more holistic, enduring approach to managing PVD, fostering better vascular health and overall well-being.

REFERENCES

1. Kasper DL, Braunwald E, Fauci AS, Hauser SL, Longo DL, Jameson JL, editors. *Harrison's Principles of Internal Medicine*. 16th ed. Vol. 2. New York: McGraw-Hill Medical Publishing Division, 2018; p.1486.
2. Fauci AS, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, et al. *Harrison's Principles of Internal Medicine*. 17th ed. Vol. 2. New York: McGraw-Hill Medical Publishing Division, 2008; p.1899.
3. Criqui MH, Aboyans V. Epidemiology of peripheral artery disease. *Circ Res*, 2015; 116(9): 1509–26. Available from: <https://doi.org/10.1161/CIRCRESAHA.116.303849>
4. Eberhardt RT, Raffetto JD. Chronic venous insufficiency. *Circulation*, 2014; 130(4): 333–46. Available from: <https://doi.org/10.1161/CIRCULATIONAHA.113.006898>

5. Gerhard-Herman MD, Gornik HL, Barrett C, et al. 2016 AHA/ACC guideline on the management of patients with lower extremity peripheral artery disease. *Circulation*, 2017; 135(12): e726–79. Available from: <https://doi.org/10.1161/CIR.0000000000000471>
6. Walker BR, Colledge NR, Ralston SH, Penman ID, editors. *Davidson's Principles and Practice of Medicine*. 23rd ed. Edinburgh: Elsevier, 2018; p.635–7.
7. Longo DL, Fauci AS, Kasper DL, et al., editors. *Harrison's Principles of Internal Medicine*. 20th ed. Vol. 2. New York: McGraw-Hill, 2018; p.2125–9.
8. Das S. *A Manual on Clinical Surgery*. 13th ed. Kolkata: Dr. S. Das Publishers, 2014; p.452–60.
9. Sharma PV, editor. *Chakradatta*. 1st ed. Varanasi: Chaukhambha Orientalia, 2010; 121–4.
10. Varasha, Singh DN, Singh PR, Singhal T. Clinicopathological study on Nadi-Pariksha in Raktagat Vata w.s.r. to Hypertension: A literary review. *J Ayurveda Integr Med Sci*, 2024; 9(7): 120–6. Available from: <https://doi.org/10.21760/jaims.9.7.17>
11. Dwivedi LN. *Ayurvedic Management of Vatarakta (Gout)*. Varanasi: Chowkhamba Sanskrit Series Office, 2007; p.61–8.
12. Tripathi B, editor. *Charaka Samhita*, Chikitsa Sthana, Ch.16, Ver.100–5. Varanasi: Chaukhambha Surbharati Prakashan, 2011; p.100–5.
13. Tiwari PV. *Concept of Avarana in Ayurveda*. Varanasi: Chaukhambha Vishvabharati, 1996; p.37–41.
14. Singh A, Mahajan S, Tiwari A, Mahajan K. A conceptual study on Vatarakta w.s.r. to Gouty Arthritis. *Ayushdhara*, 2024; 11(3): 70–8. Available from: <https://doi.org/10.21760/jaims.9.7.17>
15. Sushruta. *Sushruta Samhita*, Sharira Sthana 7/11–14. 11th ed. Varanasi: Chaukhambha Orientalia, 2014; p.369–70.
16. Sushruta. *Sushruta Samhita*, Nidana Sthana 3/7; Chikitsa Sthana 17/65. Varanasi: Chaukhambha Orientalia. 2014; p.233, 533.
17. Sushruta. *Sushruta Samhita*, Sutra Sthana 14/7. Varanasi: Chaukhambha Orientalia, 2014' p.65, 190.
18. Sushruta. *Sushruta Samhita*, Chikitsa Sthana 17/64–65. Varanasi: Chaukhambha Orientalia, 2014; p.532–3.
19. Charaka. *Charaka Samhita*, Vimana Sthana 5/8; Chikitsa Sthana 24/16. Varanasi: Chaukhambha Bharati Academy, 2017; p.274, 643.
20. Sidawy AN, Perler BA. *Rutherford's Vascular Surgery and Endovascular Therapy*. 9th ed. Philadelphia: Elsevier, 2019.

21. Criqui MH, Aboyans V. *Peripheral Artery and Venous Disease*. 1st ed. Springer; 2015.
22. Charaka. *Charaka Samhita*. Varanasi: Chaukhambha Orientalia, 2014; p.571–82.
23. Sastry JLN. *Dravyaguna Vijnana*. Reprint ed. Varanasi: Chaukhambha Orientalia, 2016; p.246.
24. Mahadevan L. *Principles and Practice of Ayurvedic Clinical Medicine*. 3rd ed. Tamil Nadu: Sarada Mahadeva Iyer Ayurvedic Educational and Charitable Trust, 2021; p.249–64.
25. Vagbhata. *Ashtanga Hridaya*. 2nd ed. Varanasi: Krishnadas Academy, 2015; p.308–16.
26. Shastri AD, editor. *Sushruta Samhita: Hindi Commentary*. 11th ed. Varanasi: Chaukhambha Sanskrit Sansthan, 1997; Sutra Sthana 14/34.
27. Chakrapanidatta. *Chakradatta*. Varanasi: Chaukhambha Sanskrit Series Office, 2007; p.270–7.
28. Agnivesha, Charaka, Dridhabala. *Charaka Samhita with Ayurveda Dipika commentary of Chakrapanidatta*. Reprint ed. Varanasi: Chaukhambha Sanskrit Sansthan, 2004; p.42.
29. Thakral KK. *Dalhana on Sushruta Samhita, Chikitsa Sthana 24/52–6*. Varanasi: Chaukhambha Orientalia, 2014.
30. Bhavamishra. *Bhavaprakasha*. Reprint ed. Varanasi: Chaukhambha Bharati Academy, 2009; p.720–32.
31. Trikamji YT, editor. *Charaka Samhita*. 2nd ed. Varanasi: Chaukhambha Krishnadas Academy, 2014; p.33–8.
32. Vagbhata. *Rasaratna Samuchchaya*. 1st ed. Varanasi: Chaukhambha Orientalia, 2006; p.125–32.
33. Vagbhata. *Ashtanga Hridaya*. 2nd ed. Varanasi: Krishnadas Academy, 2015; p.13–21.
34. Gharote ML, Ganguly SK. *Teaching Yoga*. 1st ed. Lonavla: Lonavla Yoga Institute, 2011; p.98–102.
35. Criqui MH, Aboyans V. Epidemiology of peripheral artery disease. *Circ Res*, 2015; 116(9): 1509–26. Available from: <https://doi.org/10.1161/CIRCRESAHA.116.303849>
36. Charaka. *Charaka Samhita*, Nidana Sthana 1/5. Varanasi: Chaukhambha Orientalia, 2014.
37. Madhavakara. *Madhava Nidana, Vatarakta Nidana*. 22nd ed. Varanasi: Chaukhambha Bharati Academy, 2010.
38. Charaka. *Charaka Samhita*, Chikitsa Sthana 29. Varanasi: Chaukhambha Orientalia, 2014.
39. Vagbhata. *Ashtanga Hridaya*, Sutra Sthana 13/25. Reprint ed. Varanasi: Chaukhambha Sanskrit Series, 2015.

40. Sharma RK, Dash B. *Charaka Samhita – English Translation*, Chikitsa Sthana. Vol. 3. Varanasi: Chowkhamba Sanskrit Series Office, 2001.
41. Bhishagratna KL, editor. *Sushruta Samhita*, Chikitsa Sthana 9/12–15. Varanasi: Chaukhambha Sanskrit Sansthan, 2008.
42. Vagbhata. *Ashtanga Hridaya*, Chikitsa Sthana 22. Varanasi: Chaukhambha Publications, 2012.
43. Bhishagratna KL, editor. *Sushruta Samhita*, Sutra Sthana 13/4; Chikitsa Sthana 9/22. Varanasi: Chaukhambha Sanskrit Sansthan, 2008.
44. Charaka. *Charaka Samhita*, Sutra Sthana 7/31. Varanasi: Chaukhambha Orientalia, 2014.