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A REVIEW ARTICLE ON OCCUPATION THAT INCREASES VARICOSE VEINS IN AN INDIVIDUAL ALONG WITH AYURVEDIC MANAGEMENT

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ABSTRACT

Veins that become enlarged and twisted often appear as bulging, blue blood vessels which are visible through the skin and are termed Varicose veins. According to statistics15 20 % of the population in India is suffering from varicose veins. The prevalence rate of varicose veins in India is about 47,928,177 and that is an alarming level. Various studies have suggested that occupation plays a pivotal role in varicose veins. Several occupational agents and jobs have been identified as definite or probable causes of varicose veins in various epidemiological studies. Many articles have been written on the same issue but very few have described the ayurvedic approach towards varicose veins. Hence this review article was done keeping in mind occupation, varicose vein, and ayurvedic management. This review reveals that various occupations are the root cause of varicose veins, and ayurveda plays an important role in its management.

Keywords: Varicose veins, prevalence, occupational exposure, Ayurveda, Surgical management.

INTRODUCTION

This briefing paper presents the occupation that increases varicose veins. It includes a brief description of the topic, anatomy of the lower limb, aetiology, occupation which causes varicose veins, its ayurvedic approach, and management.

Materials and Methods

Classical texts of Ayurveda viz. Charaka Samhita, Sushruta Samhita, Ashtanga Sangrah, and Ashtanga Hridaya were consulted as research references for varicose veins. Literature available regarding varicose veins in modern text was also collected. These references from both streams of knowledge were compared and analysed critically.

DISCUSSION

Varicosity of veins is said to exist when the vein is dilated, lengthened, and tortuous. The incidence of varicose veins in India seems to be far less compared to the western population because most of the patients do not come to the hospital unless complications such as pain, oedema, ulceration, etc. occur.

Anatomy: -

Venous blood from the skin and subcutaneous fat in the legs is returned to the heart through veins working against gravity. These veins contain valves to prevent a backflow of blood. There are three types of veins in the lower limbs, and two of these are important when considering venous disease.

Deep veins: These are the venae commutants to the tibial arteries – the popliteal, tibial, and femoral veins and their tributaries. These veins are found beneath the fascia within the fascial compartments. Almost 90% of all venous blood leaves the legs by the deep veins.11 The blood is under high pressure due to the effects of the calf and foot muscle pump.

Superficial veins: These drain the skin and subcutaneous fat and are situated beneath the skin in the superficial fascia. They include the long and small saphenous veins and their tributaries. The blood is normally under lower pressure than in the deep system due to the protective effect of one-way valves which are in the perforating veins connecting superficial and deep systems. If these valves become incompetent, pressure rises in the superficial system. Some venous blood drains towards the deep venous system through perforating veins or via the long or short saphenous veins which join the deep system at the sapheno-femoral junction in the groin and the sapheno-popliteal junction behind the knee. It can also drain directly into the deep venous system or bypass the deep system entirely and enter the pelvis. The deep veins carry more blood at a higher pressure than the superficial veins. Blood is moved from the leg to the heart primarily by the pumping action of the leg muscles, i.e., by muscular compression. The deep veins are subjected to intermittent pressure both at rest and during exercise from pulsations of the adjacent arteries and contractions of the surrounding muscles, which compress the veins and force blood up the limbs towards the heart. As the muscles surrounding the deep veins relax, the pressure within the deep vein lowers temporarily. This causes venous blood to be drawn from the superficial veins into the deep veins, in turn lowering the superficial venous pressure. Competent valves are required to prevent reflux and to protect the superficial veins and capillaries from a sudden rise in venous pressure when the muscles contract.

Aetiology: - The venous system in the legs carries the blood in the opposite direction of gravity towards the heart. This causes weakening of the nervous system. In turn, the valves of the veins become weak and lose their elasticity. Hence the blood becomes stagnant in the veins instead of flowing. Varicosity may happen in both superficial and deep veins, and both will be painful.

According to *Ayurveda*, varicosity is mainly a *Vataja Vyadhi*, *Raktha*, and *Pitta* being involved in the condition. As *Vyaana Vaata* is responsible for all kinds of movements and transportation in the body, disturbed *vyaana vaata* affects the valves of the veins, and hence the upward movement of the blood is hampered. Because *pitta* is another *dosha* involved in this condition, it leads to burning sensations, discoloration of the skin, and ulcer/wound formation in later stages.

OCCUPATION:

Healthcare professionals: Nurses, doctors, medical technicians, and medical assistants may be on their feet during long shifts at work, while lab technicians or billing coders may sit all day.

Office or computer work: Administrators, technology personnel, executives, customer service representatives, or others whose work is performed on a computer or the phone while sitting at a desk may not move at all for hours at a stretch, particularly when absorbed by a complex task.

Cosmetology: Hairstylists, barbers, massage therapists, and others who provide personal services may unconsciously revert to the same standing position throughout the day.

Commercial driving: If it's your job to drive a bus, cab, or truck, there's only one way to do it — sitting down. Commercial truck drivers are limited by law to the number of hours they can drive at a time, but that number is a relatively high 11 hours.

Retail: Depending upon the specific job, some salespeople may be able to move about during the day, but most cashiers are standing at their registers for long periods of time.

Teaching: Teachers, professors, and instructors may spend much of their days on their feet in the classroom or lab.

Manufacturing: Factory workers' jobs can be highly specialized, so they may perform a single task, standing or sitting in one position, for their entire shifts.

Hospitality: Some people in the hospitality industry, such as restaurant servers, do put in a lot of miles as they work, but chefs, dishwashers, and others in the kitchen may not.

TREATMENT: -

Ways to help reduce the risk of varicose veins.

- Regular exercise, particularly walking or jogging helps to keep veins healthy.
- Reduce pressure on veins by maintaining a healthy weight.
- opt for lower-heeled shoes instead of high heels.
- Avoid sitting with crossed legs for extended periods.
- Take a break at work and keep your legs elevated for a few minutes.
- Wear compression stockings to help prevent blood from pooling in leg veins.

AYURVEDIC MANAGEMENT ON VARICOSE VEINS

Foods that lead to impairment of *vata* and *pitta* in the body are to be avoided—for example, junk foods, salty foods, excess spicy foods, dry food—as well as smoking. Ayurveda mentions many herbal drugs—like Arjuna, Manjishta, Punarnava, Guggulu, Sariva, Triphala, Amalaki, and Ashwagandha—that help to strengthen the valves of the vein and promote healthy venous circulation in the body. Classically, both herbal and herbo-mineral drugs which are helpful to get rid of this condition include Punarnava guggulu, Arjunarista, Chandanasav, Sarivadyasava, Nagarjunabhra rasa, Abhraka bhasma, Rasa Sindoora.

External treatments like basti karma (colon therapy), Jlaukavacharana (leech therapy), and Raktha mokshana (blood-letting treatment) are useful in treating varicose veins.

SURGICAL MANAGEMENT ON VARICOSE VEINS:-

1. Endothermal ablation
2. Radiofrequency ablation
3. Endo venous laser treatment
4. Ultrasound-guided foam sclerotherapy
5. Ligation and stripping
6. Transilluminated powered phlebectomy.

CONCLUSION

The above review reveals that occupation plays an important role in varicose veins. and to overcome it ayurveda, lifestyle changes, and surgical treatment plays an important role.

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