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Case Report

Modern Insight into an ancient practice: Fasd (Venesection) for varicose vein Relief: A case study

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Abstract

Varicose veins are defined as vein disorders, particularly in the legs, in which several dilated and lengthened veins have permanently lost their valvular efficiency. This impairs backward flow and causes turbulence in the blood circulation in the lower extremities. It is particularly prevalent in the superficial veins of the legs, and it presents with a number of related symptoms that exacerbate varicose veins. The Unani medical system uses many *Tadbeer* (regimental therapies), which is also known as *Ilaj-Bit-Tadabeer* like *Fasd* (Venesection) and *Irsale-Alaq* (Leech therapy). This study has demonstrated the effectiveness of *Fasd* (Venesection) in treating varicose veins by enhancing blood circulation and lowering *Imtila* (Blood congestion). In order to achieve this, the patient was monitored for a month and treated by *Fasd* (Venesection) every third day with a supportive herbal medicine that included a decoction of 6 grams bark of *Arjun* (Terminalia Arjuna) twice a day for 21 days. *Fasd* (Venesection), has been shown to dramatically lower venous engorgement by reducing oedema, congestion, and pain.

Keywords: Unani Medicine, Imtila, Ilaj-Bit-Tadbeer, Fasd(Venesection), Bark of Arjun.

Introduction

Varicose is an ancient term. The word's root is the Greek word "grape like." Hippocrates most likely used it as a medical descriptor for the first time in 460 BC. More than 3500 years ago, Ebers' papyrus had the first description of varicose veins. It was referred to as "Serpentine windings" in this ancient Egyptian book.[1] The condition known as *Dawali* (Varicose veins) causes the veins in the lower limbs to enlarge, become convoluted, become noticeable, and turn greenish[2,3] Even while varicose veins are a highly prevalent condition that affects people of all ages, from adolescence to the elderly, their origin is still not fully known. The accumulation of non-purulent *Balghami* (Phlegmatic), *Saudavi* (Atrabilious), or *Damvi Matter* (Sanguinous matter) in leg veins is thought to be the reason, according to Greco Arab physicians because of frailty.[2, 3, 4, 5] These days, varicose veins are thought to have a complex aetiology. Patients may experience leg restlessness, ankle oedema, itching, and pain, particularly when standing. Venous eczema, venous pigmentation, lipodermatosclerosis, superficial thrombophlebitis, and venous ulceration are among the most problematic, upsetting, and painful conditions that can arise from varicose veins.[6,7] These complications can also be costly for medical professionals. Vascular illnesses considerably damage a person's health-related quality of life. Vein varicosity affects about 15% of adults.[8] According to population-based studies, the prevalence of varicose veins varies greatly around the globe, with the western world having the highest rate, which typically ranges from 10–30% for men and 25–55% for women[9]. Overall frequency was much greater among South Indian workers than North Indian workers (6.8%), according to research done among railway personnel of the same socioeconomic background performing the same sweeper task in North and South India[10]. It is common practice to treat varicose veins surgically. The primary goals of surgical treatment are to remove the incompetent saphenous trunks and the related varices, as well as to ligate the source of the venous reflux. The drawback of removing saphenous veins is that they are often accompanied by a nerve that could be injured during the vein stripping procedure.

Additionally, the likelihood of such cases recurring is very high[6]. Finding effective and affordable alternative therapy is urgently needed due to the high rate of recurrence and the drawbacks of surgical treatment. *Imtila-e-dam* (Plethora) is the main cause of varicose vein signs, symptoms, and consequences; venous blood must be extracted, and pressure must be lowered. Bloodletting has been noted by Greeco-Arab doctors in situations of *Imtila* (Plethora). Ibn Sina, Ismaiel *Jurjani*, and *Zakaria Razi* have all mentioned indication of *Fasd* in *Dawali* management[2, 4, 11]. *Faṣd* literally means to cut or tear the vessel; it is reported that he severed the patient's vessel.[12]"*Fasd* (Venesection) is a process of complete evacuation which drains out blood and dominating humours mixed with blood from vein," according to *Ibn-i-Habal Baghdadi.*[13] *Faṣd* (Venesection), according to *Ibn-i-Sinā*, is the general eradication of *Humors.* It eliminates extra *Humor* in the same ratio that blood vessels do.[14] The best and most satisfactory definition, among others, was provided by the author of *Kitab Al-Umdah Fil-Jarahat*, who stated that "*Faṣd* is a sort of *Tafarruq-i-Ittisāl* (loss of continuity) that is done in veins purposely by any specialized instrument.[15] Bloodletting or venesection are other names for phlebotomy, which is a significant medical procedure that has been utilized by many cultures from antiquity to the present.[16.] According to *Unani* literature, there are several locations of *Fasd* for specific diseases, and the *Warid-i-Sāfin* (Saphenous vein) is utilized to drain blood from organs behind the liver. [17, 18, 19,] Venesection seeks to achieve.

a) To lower the excess blood volume, which is more prone to illness.

b) To prevent the building of harmful and unhealthy materials.

c) To eliminate harmful substances from various body parts.

d) To increase metabolic activity.

e) To maintain normal condition in people with bilious temperaments [20.]

No treatment can prevent new varicose veins from developing in the future, as venous disease typically progresses over time. In addition to many other risks, recurrence may happen later on following surgery. The highest focus is given to therapeutic modalities that provide long-term effectiveness (control of symptoms or consequences) without the use of drugs or surgery. Since *Fasd* is praised by *Unani* doctors for its positive impact in the treatment of varicose vein disease, the study sought to assess its impact on patients' rehabilitation. Using the traditional methods of tight stocking and foot elevation, it assessed the treatment process even further. The study attempted to verify the statements made by *Unani*. If these claims turn out to be accurate, it will improve the care of patients with varicose veins by lowering their disability-adjusted life year (DALY) and increasing their productive hours.

Methodology

On 5th March, 2025, a 40-year-old male patient came to the outpatient department of H.S.Z.S. Govt. Unani Medical College and Hospital in Bhopal (M.P). In addition to having noticeable, dilated, tortuous veins at the postero-lateral aspect of the calf area of both legs (particularly on the right leg) for the last year, he was complained of having radiating discomfort in the lower limb from calf to dorsum of foot on both legs. He also complained of lower back ache for a year. Additionally, he experienced a dull ache that was accompanied by a burning feeling in both legs and the ankle area. According to his personal background, he works as a shopkeeper and must stand for four to five hours every day. He had no any addiction of smoking or alcohol intake. No relevant medical history found.

Examination of patient - A physical and systematic examination were conducted. Every vital sign is stable. With no use of compression stockings, the patient appears to be in good health and has a torturous dilated superficial vein in the posterolateral aspect of the right limb near the ankle and posterior side of the calf. There is a slight burning sensation near the ankle, mild swelling, normal pulsation, and no hardness in the tortuous vein, slight bluish discoloration was also evident, no ulceration was noticed. Perthe's test came back positive, there was no bruit on auscultation at site of varicosity, and there was a thrill on percussion. His ECG was normal, his HB level was 15 gm/dl, his bleeding and clotting times were 2 and 3 minutes, and a general examination confirmed that the patient was hemodynamically stable. According to the VCSS scale (Table 1), the patient's condition affected his everyday activities. His score of 1-2 indicated a moderate handicap that affected his functional abilities and quality of life.

Treatment protocol- Following patient evaluation and diagnosis of humour imbalance, *Fasd* (Venesection) was selected as the main treatment modality to remove the morbid humour causing lower limb vein varicosity and vein obstruction by the *Imtila- e- Dam* (Congested blood). *Fasd* (Venesection) were performed at every third day, along with supportive internal treatment consisting of a decoction of *Arjun Bark* 6gm twice daily for 21 days. This is administered to restore humour balance, reduce oedema, and alleviate pain.

Day	0	3	6	9	12	15	18
Sitting	1st	2nd	3rd	4th	5th	6th	7th

Using a 22G scalp vein, 15-20 ml of blood was extracted from the superficial branch of the Small Saphenous vein near the dorsum of the foot in each session during the 0–18th day of *Fasd* (Venesection). Following the decoction of bark arjun and *Fasd* (Venesection), a progressive alleviation of symptoms such as discomfort and burning

feeling was noted. Pain reduction during and after therapy was evaluated using the Venous Clinical Severity Score Table-1 (VCSS).

Therapeutic intervention – A comprehensive evaluation of the patient was conducted after the procedure was explained and written informed consent was obtained. Before continuing, the patient was seated comfortably and their vitals were taken. To obstruct blood flow and enlarge the right saphenous minor vein, making it noticeable, a tourniquet was placed above the ankle joint. The area was sterilized with a spirit swab, and a 22G needle was inserted to allow 15-20ml of blood to flow out, adhering to the limits set by the IRB guidelines. Upon completion, the needle was carefully removed and discard also antiseptic dressing was applied. Vital signs were reassessed, and the patient was monitored for 30 minutes post-procedure to ensure stability and rule out any adverse reactions. Considering the patient's haemoglobin status and capillary refill, *Fasd* (Venesection) were conducted every third day for 21 days. The patient was followed up via telephonic consultations over a period of 2 months and was advised to report immediately to the hospital if any recurrence of symptoms occurred.

Table I: Venous Clinical Severity Scoring system

Attribute	**Absen:0**	**Mild: 1**	**Moderate: 2**	**Severe: 3**
1. Pain or other discomfort (i.e. aching, heaviness, fatigue, soreness, burning) Presumes venous origin	None	Occasional pain or other discomfort (i.e. not restricting regular daily activities)	Daily pain or other discomfort (i.e. interfering with but not preventing regular daily activities)	Daily pain or discomfort (i.e. limits most regular daily activities)
2. Varicose veins must be ≥3 mm in diameter to qualify in the standing position.	None	Few: scattered (ie, isolated branch varicosities or clusters) Also includes corona phlebectatica (ankle flare)	Confined to calf or thigh	Involves calf and thigh
3.Venous oedema				
Presumes venous origin	None	Limited to foot and ankle area	Extends above ankle but below knee	Extends to knee and above
4.Skin pigmentation				
Presumes venous origin Does not include focal pigmentation over varicose veins or pigmentation due to other chronic diseases	None	Limited to peri malleolar area	Diffuse over lower third of calf	Wider distribution above lower third of calf
5. Inflammation				
More than just recent pigmentation (ie, erythema, cellulitis, venous eczema, dermatitis)	None	Limited to peri malleolar area	Diffuse over lower third of calf	Wider distribution above lower third of calf
6. Induration				
Presumes venous origin of secondary skin and subcutaneous changes (ie, chronic oedema with fibrosis, hypodermitis). Includes white atrophy and lipodermatosclerosis	None	Limited to perimalleolar area	Diffuse over lower third of calf	Wider distribution above lower third of calf
7. Active ulcer number	0	1	2	>3
8. Active ulcer duration (longest active)	None	<3 months	>3 month but <1 year	Not healed for >1 year
9. Active ulcer size (largest active)	None	Diameter <2 cm	Diameter 2-6 cm	>6 cm
10. Use of compression therapy	None	Intermittent use of stockings	Wears stockings most days	Full compliance: stockings

Result

Prior to treatment, the patient experienced noticeable, dilated, tortuous veins at the postero-lateral aspect of the calf region of both legs (particularly on the right leg) and radiating discomfort in the lower limb from the calf to the dorsum of the foot of both legs. Following the course of treatment, there is a noticeable decrease in leg pain, swelling, skin change and a moderate decrease in venous dilatation noted at weekly follow up. Evaluated by using the VCSS score (Table 2).

Table 2: Weekly Assessment of Clinical Symptoms Based on VCSS Score(BF = Before Follow-up, AF = After Follow-up).

	Day -3		Day 7		Day -14		Day -21	
	BF	AF	BF	AF	BF	AF	BF	AF
Pain	2	2	2	1	1	1	1	0
Burning sensation	2	2	2	1	1	1	1	0
Oedema	1	1	1	1	1	1	1	0
Tortuosity	3	3	3	3	3	2	2	2
Skin change	2	2	2	2	2	1	1	0

Phytochemical constituents of Stem bark[21-43] of Terminalia Arjuna (Roxb.) Wight and Arn.

1. **Triterpenoids** – Arjunin, Arjunic acid, Arjungenin, Terminic acid, Terminoltin, Arjunolic acid
2. **Ursane triterpenoids**- 2α,3ß-dihydroyurs-12, 18-oic acid 28-o-ß-d-glucopyranosyl ester, 2α,3ß,23-trihydroxyurs-12, 18-dien-28-oic acid 28-O-ß -glucopyranosyl ester, Qudranoside Vill, Kajiichigoside Fi, 2α, 3ß, 23-trihydroxyurs-23-trihydroxyurs-12, 19-dien-28-oic acid 28-O- ß -D-glucopyranosyl ester
3. **Glycosides**- Arjunetin, Arjunoside I, II, Arjunolone, Arjunolitin, Arjunaphthanoloside, Arjunglucoside IV and V, Arjunasides A-E, Olean-3ß,22ß-diol-12-en-28-ß-D-glucopyranosie-oic acid, Terminarjunoside I and II, Terminoside A, Termionic acid
4. **Flavonoids and phenolics**- Arjunone, Luteolin, Baicalein, Ethyl gallate, Gallic acid, Kempferol, Oligomeric proanthocyanidins, Pelargonidin, Quercetin, (+)-catechin, (+)-gallocatechin and (-)-epigallocatechin, Gallic acid, ellagic acid and its derivatives such as 3-O-methyl-ellagic acid 4-O- ß -D-xylopyranoside. 3-O-methyl ellagic acid 3-O-rhamnoside, 3-O-methyl ellagic acid 4'-O-α-l-rhamnophranoside, (-)-epicatechin
5. **Tannins**- Pyrocatechols, Punicallin, Castalagin, Casuariin, Casuarinin, Punicalagin, Terchebulin, Terflavin C
6. **Minerals and trace elements**- Calcium, magnesium, aluminum, zinc, copper, silica
7. **Other compounds** - ß -Sitosterol

The phytochemicals in arjuna terminalia bark, such as flavonoids, have vascular amplification and antioxidant properties. They also inhibit endothelial activation and platelet aggregation, and tannins improve nitric oxide generation while relaxing vascular segments, promoting wound healing, and having astringent properties. Minerals and amino acids alter blood flow and venous dilatation, and glycosides have anti-inflammatory qualities that can help lessen discomfort, oedema, and blood tugging in the afflicted vein.

Conclusion

This case study suggests that there is significant therapeutic value in treating *Dawali* (Varicose veins) by the use of *Fasd* (Venesection), which is a technique employed in Unani medicine, particularly for acute discomfort and *Imtila* (Severe congestion). As vascular congestion, venous insufficiency, and lower limb pain are said to be caused by excessive or abnormal blood (*Dam*), the intervention is in line with the traditional idea of eliminating *Fasid Akhlaat* (Morbid Humors). *Arjuna Terminalia Bark*, on the other hand, has vascular-strengthening, anti-inflammatory, and cardioprotective properties that make it a helpful holistic and traditional herb for treating venous insufficiency.

Discussion

The Unani principle of *Tanqiya-e-Mawad* (evacuation of diseased materials), which is crucial in the treatment of vascular illnesses, is supported by this Tadbeer (Regime). Clinically, many practitioners claim that after *Fasd,* their afflicted limbs no longer experience pain, heaviness, or oedema. Additionally, when used sparingly, it seems to help reduce side effects like skin changes and ulceration.

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