

# Abnormal Venous Dilatation other than Typical Varicose Vein, Rare Encounters

Karmacharya RM,<sup>1</sup> Shrestha B,<sup>1</sup> Shrestha BK,<sup>1</sup> Devbhandari M,<sup>1</sup> Tuladhar SM,<sup>1</sup> Hodde A,<sup>2</sup> Thermann F<sup>3</sup>

<sup>1</sup>Department of Surgery (CTVS),

Dhulikhel Hospital, Kathmandu University Hospital  
Dhulikhel, Kavre, Nepal.

<sup>2</sup>Department of Vascular Surgery,

University Medical Center, Groningen, Holland.

<sup>3</sup>Department of Vascular Surgery,

Carl von Basedow Klinikum,

Merseberg, Germany.

## ABSTRACT

Varicose vein, one of the common vascular illnesses is usually a disease in lower limb. This is due to reflux of blood from deep venous system to superficial venous system. Rarely, this disease can also happen in veins in different location. Four such rare encounters are mentioned in this case series.

## KEY WORDS

*Superficial veins, Unconventional sites, Varicose vein*

## Corresponding Author

Robin Man Karmacharya

Department of Surgery (CTVS),

Dhulikhel Hospital, Kathmandu University Hospital

Dhulikhel, Kavre, Nepal.

E-mail: reachrobin773@hotmail.com

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## INTRODUCTION

Varicose vein is a common vascular illness characterized by prominent dilated veins and can be associated with pain, pigmentation, itchiness, ulceration. This condition, which is almost always present in lower limbs, can occur in other parts of body. In case of lower limb, varicose vein can affect great saphenous vein, lesser saphenous vein or perforators. We are reporting four cases of superficial venous dilatation present in sites other than the common sites of varicose vein. None of the patients have concomitant varicose vein of Great Saphenous or Lesser Saphenous system. All these cases (except the 4<sup>th</sup> case who didn't opt for surgery) that agreed for surgery were operated with junction ligation and phlebectomy and improved. None of the cases have experienced recurrence at follow up of 6 months to 2 years.

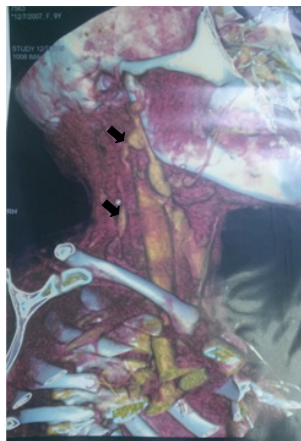
## CASE SERIES

### Case 1: Abnormal vein dilatation on right arm originating from basilic vein

A forty year male working abroad in a car factory presented with prominent veins in right arm since a year. He was working in car factory since a decade with job requiring excessive bending down most of the time during work. Since a year he noticed prominent veins, gradually progressive and associated with pain but without itchiness. We performed CT venogram which showed abnormal dilatation of superficial veins in medial aspects of arm and originating from basilic vein in single site (Fig. 1). He underwent 'junction' ligation and phlebectomy which managed both cosmesis as well as his symptoms. He doesnot have recurrence of the symptoms in followup of a year.



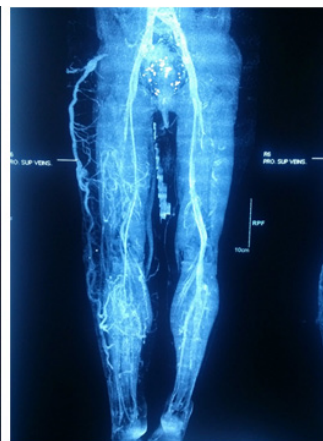
**Figure 1.** CT angiogram (reconstruction) showing abnormally dilated veins in arm originating from basilic.



**Figure 2.** Presence of dilated veins arising from right jugular vein (Shown in arrows).



**Figure 3.** Presence of varicose vein in lateral accessory vein with normal great saphenous vein.



**Figure 4.** Presence of dilated embryonic right lateral marginal with normal great saphenous vein.

### Case 2: Abnormal dilated vein in neck originating from external jugular vein.

A 12 year old girl from Janakpur, Nepal had prominent veins in right side of neck since 2 years which was gradually progressive. The prominent veins sometimes increased temporarily during exhaustion. Besides cosmetic issues, she didnot have pain or bleeding from the prominent veins. CT venogram was done which showed abnormally dilated superficial veins arising from external jugular vein and the veins were extending in right neck going towards the right shoulder. She underwent 'junction' ligation and multiple phlebectomy. She doesnot have cosmetic or other issues in follow up of a year and half.

### Case 3: Abnormally dilated anterior accessory saphenous vein.

A thirty years female presented with prominent dilated vein in thigh and leg especially in the anterior part. Doppler ultrasound showed presence of dilated anterior accessory saphenous vein with reflux from one of the perforator in upper thigh. Great saphenous vein and shortsaphenous vein were normal. The patient underwent junction ligation and multiple phlebectomy. Rarity in this case is the presence of only dilated anterior accessory saphenous vein without saphenofemoral incompetence. Postoperative result was good and there is no recurrence in followup of two years.

### Case 4: Lateral marginal vein in lower limb.

A thirty five year female presented with prominent dilated veins in lateral aspect of thigh and leg since childhood. This has been gradually progressive and currently associated with pain. Doppler ultrasound showed persistent lateral marginal vein (embryonic) with varicosities. Although technically this case is a venous malformation, the way this case presented is similar to varicose vein with prominent dilated vein and pain. The patient however did not opt for surgery and is under compression stocking and other conservative management.

## DISCUSSION

Varicose veins are prominent, dilated, tortuous superficial veins due to reflux of blood from deep venous system to superficial veins.<sup>1</sup> It is most of the times a disease of lower limb with involvement of Great Saphenous or Lesser Saphenous veins. Dilated veins upper limb as mentioned in case 1 is extremely rare venous disease.<sup>2,3</sup> Sometimes, this is due to congenital vascular anomalies such as Klippel Trenaunay Syndrome and the Parkes Weber Syndrome.<sup>4-6</sup> Junction ligation with or without phlebectomy, sclerotherapy is treatment if the dilated vein is bothersome or is progressive.

As mentioned in case 2, abnormally dilated veins arising from external jugular vein is also extremely rare. Sometimes this condition needs to be differentiated from Jugular Phlebectasia, in which there is dilatation of jugular vein which presents as self-reducible soft tissue swelling of neck.<sup>7</sup>

In case of case 3, although the clinical picture seems similar with other varicose veins of lower limb, the surprising thing is that lateral accessory vein is involved without involvement of Great saphenous vein. This is considered rare entity.

In the case 4, the involved vein is persistent embryonic lateral marginal vein.<sup>8,9</sup> This rare entity can occur along with disease like Klippel Trenaunay Syndrome.<sup>4,10</sup> These veins are connected to deep veins by numerous perforators and can progressively dilate over years warranting timely intervention.

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