

Case Report

An unusual case of venous varix on forehead

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ABSTRACT

Vascular anomalies include a wide number of disorders from a simple birthmark to life threatening entities. One such vascular anomaly is venous varix which is a commonly encountered case by a general surgeon although venous varix occurring on the forehead as being reported here is a rarity. Authors present a case of swelling over forehead at orbital verge which becomes prominent on performing valsalva maneuver. Case is of a 10year old girl brought to OPD with complaints of swelling over the left side of forehead since birth which becomes prominent on valsalva maneuver, with no associated complaints of pain or difficulty in eye opening. On examination, there was a 2cm diameter swelling present over the left forehead just above the medial margin of left eyebrow. CECT Brain showed no bony or intra orbital extension. Patient underwent excision of the varix. Postoperatively patient recovered well and discharged with cosmetic satisfaction.

Keywords: Forehead venous varix, Venous varix

INTRODUCTION

Vascular anomalies include a wide number of disorders from a simple birthmark to life threatening entities. They remain as diagnostic and treatment challenge to the surgeon. A thorough history and physical examination will allow the surgeon to make a sound diagnosis for the majority of clinical cases. Imaging modalities such as ultrasound, CT-scan and MRI aid when diagnosis is in query.

Lesions located in the head and neck region require special attention as they may cause obstruction of critical structures such as the visual axis or the airway. The incidence of congenital vascular malformations in the general population is 1.5% and approximately two thirds are of venous origin.¹

Venous malformations generally manifest as a blue skin discoloration when superficial or as a soft subcutaneous mass. Venous varix is a type of venous vascular malformation. Venous varix occurs at varying sites in the

body ranging as varicose veins, esophageal varices, gastric varices, scrotal/vulvar varices, vesical varices and rectal varices. Occurrence of venous varix on the forehead is relatively unknown. The veins draining blood from the forehead are supratrochlear, supraorbital and angular vein.² The cause for congenital venous varix of these veins is not known. Congenital venous dilation elsewhere in the body is attributed to causes such as klippel-trenaunay syndrome, maffucci syndrome, blue rubber bleb nervous syndrome, valvular incompetence, agenesis, hypoplasia.³

CASE REPORT

A 10-year-old girl was brought by her father to our OPD with complaints of swelling over left side of forehead since birth with no associated complaints of pain or difficulty in eye opening. On examination, there was a 2cm diameter swelling present over the left forehead just above the medial margin of left eyebrow which increased in size on performing valsalva maneuver. There was no associated tenderness.

CECT brain showed evidence of hyperdense lesion measuring 19mm x 8.5mm in size in subcutaneous tissues in left frontal region at supero-medial aspect of the left orbit. It shows significant enhancement in post contrast images with multiple enhancing venous channels with no associated bony or intra-orbital extension.

Patient underwent surgery of excision under general anaesthesia. Supraorbital vein and angular vein were identified, ligated and cut. Excision was carried out and hemostasis was ensured followed by closure with fine sutures, special care was taken for cosmetic reason as was involving face. There was no intra operative difficulties or complications faced.

Postoperatively daily dressings were carried out and patient was put on oral antibiotics and analgesics which were gradually stopped, no post-operative complication was noted, patient recovered well and discharged with cosmetic satisfaction. Regular follow by patient was done and showed good cosmetic results with scar getting covered by the growth of eyebrows.

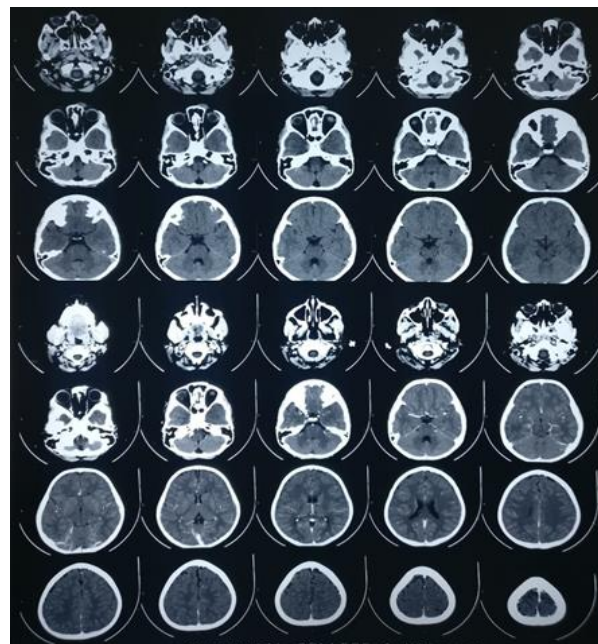


Figure 3: Cect brain shows no bony or intracranial extension.



Figure 1: Swelling on forehead at rest.



Figure 4: Intraoperative picture shows dilated veins.



Figure 2: Swelling becomes prominent with valsalva manoeuvre.



Figure 5: Postoperative day 5 of excision.



Figure 6: Patient on follow up after 1 month.

DISCUSSION

Venous varix occurs at varying sites in the body ranging as varicose veins, esophageal varices, gastric varices, scrotal/vulvar varices, vesical varices and rectal varices. The presence of venous varix on forehead is very rare and making a diagnosis would be difficult or missed as it is not a usual site for venous varix, Imaging modalities such as ultrasound, CT-scan and MRI aid when diagnosis is in query. Lesions located in the head and neck region require special attention as they may cause obstruction of critical structures such as the visual axis or the airway. The case treated by us was that of a venous malformation in the territory of superior orbital vein and angular vein. The venous malformation was becoming prominent on performing valsalva maneuver, suggesting a direct communication with cavernous sinus via superior ophthalmic vein.

Although sclerotherapy using absolute ethanol, 3% sodium tetradecyl sulfate (STS) or bleomycin being cost effective and minimally invasive are in common use as monotherapy or conjunction to surgery; under circumstances such as this case, introduction of a sclerosing agent into the malformation with communication to cavernous sinus was fraught with danger.^{4,5} Hence, operative excision was a safer alternative, and this was proved correct by the results.

CONCLUSION

The treatment of a venous malformation presenting on the forehead with prominence on valsalva maneuver with no bony or intraorbital extension can be successfully dealt with surgical excision with no complications postoperatively and satisfactory cosmetic results.

DECLARATIONS

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REFERENCES

1. Eifert S, Villavicencio JL, Kao TC, Taute BM, Rich NM. Prevalence of deep venous anomalies in congenital vascular malformations of venous predominance. *J vascular Surg.* 2000;31(3):462-71.
2. Chaurasia B. *Human Anatomy.* 5th ed. New Delhi: CBS; 2004:62.
3. Domp Martin A, Vikkula M, Boon LM. Venous malformation: update on aetiopathogenesis, diagnosis and management. *Phlebol.* 2010;25(5):224-35.
4. Lee BB, Baumgartner I, Berlien P, Bianchini G, Burrows P, Gloviczki P, et al. International Union of Phlebology. Diagnosis and treatment of venous malformations: consensus document of the International Union of Phlebology (IUP): updated 2013. *Int Angiol.* 2015;34(2):97-149.
5. Legiehn GM, Heran MK. Venous malformations: classification, development, diagnosis, and interventional radiologic management. *Radiol Clin North Am.* 2008;46(3):545-97.

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