Case Report

Cutaneous Venous Malformation Masquerading as Hematoma in a Newborn

Chetan Khare[1], Aman Kumar[2]

A term newborn was suspected for coagulopathy due to a persisting cutaneous hematoma in the first month of life. The infant was healthy and growing well. The striking rubbery consistency and a careful clinical examination made the diagnosis.

[*J Indian Med Assoc* 2024; **122(4):** 84]

Key words **: Venous Malformation, Low Flow Lesions, Doppler.**

A four-week-old female infant was referred to our Tertiary Care Hospital for a persisting subcutaneous hematoma on the trunk raising the suspicion of coagulopathy in the newborn. The infant was born at term gestation and grew well on the mother's milk. The infant had normal baseline coagulation parameters and a reassuring platelet count. No family history of clotting disorder was present in the family. An isolated non-tender 1cm blue nodule was seen over the lateral abdominal wall. On initial screening, no similar lesion was present on the skin or oral mucosa. A striking rubbery consistency on palpation with a visual appearance of vascular channels draining to a vascular plexus in a telangiectatic arrangement, suggested it to be a cutaneous vascular malformation[1]. This was non-pulsatile and did not increase in size with crying or activity of the infant. As low flow pattern on Doppler ultrasound is consistent with this information[1]. No communication to the deeper vasculature was visualized. These vascular channels lacked arterial circulation and possibly had only one variety of vascular dysplasia comprising veins or venules, hence, a venous malformation. The parents were educated about the condition and counselled for a watchful observation. The nodule partially regressed in size but could be palpated at deeper subcutaneous tissues at six months of age.

Editor's Comment :

- The case illustrates a common venous malformation that presented itself as a cutaneous hematoma. With the high uptake of Vitamin K at birth at delivery sites in India, venous cutaneous malformations may become more visible to healthcare professionals. A careful inspection is all that is needed for diagnosis in addition to an Ultrasound. In complicated cases, a referral to a specialist is needed.

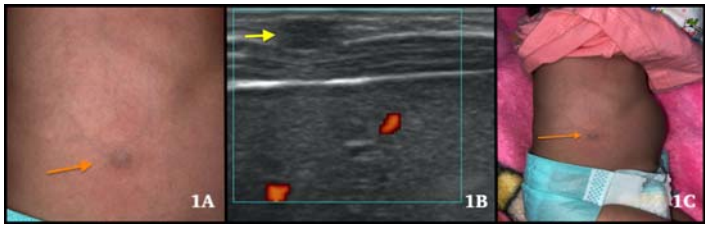

Fig 1 — A,C Depicts a superficial venous malformation mimicking a cutaneous hematoma. The image is enlarged to visualize better superficial blood vessels arranged in a telangiectatic pattern draining to the venous malformation (orange arrow in Fig 1A & C). Fig 1B is a Doppler Ultrasound of the nodule, suggesting a slow flow pattern of the vascular malformation and no communication with arterial circulation (the yellow arrow points towards the vascular malformation)

Venous malformations are the most frequent vascular anomaly, with a predilection for the facial region. A simple venous malformation comprises dysplastic veins devoid of arterial or lymphatic communication[2]. These are commonly seen at birth and continue to increase in size with somatic growth. Unlike infantile capillary hemangioma, spontaneous regression is uncommon[3]. It is often misdiagnosed but a Doppler ultrasound or MRI imaging is essential for diagnosing and assessing its deeper tissue involvements[1]. Treatment of larger lesions is sclero therapy or surgical excision. Minor isolated venous malformations are not usually associated with problems; however, multiple enlarging venous malformations should be explored for blue rubber bleb nevus syndrome and assessed for their thrombotic potential[2,4].

AIIMS Bhopal, Madhya Pradesh 462026

[1]DM (Neonatology), Assistant Professor, Department of Neonatology and Corresponding Author

[2]MD, Associate Professor, Department of Radiodiagnosis

Received on : 30/08/2023

Accepted on : 08/12/2023

References

1 Behravesh S, Yakes W, Gupta N — Venous malformations: clinical diagnosis and treatment. *Cardiovasc Diagn Ther* 2016; **6**: 557-69.

2 Diociaiuti A, Paolantonio G, Zama M — Vascular Birthmarks as a Clue for Complex and Syndromic Vascular Anomalies. *Front Pediatr* 2021; **9**: 730393.

3 Lee BB — Venous malformation and haemangioma: differential diagnosis, diagnosis, natural history and consequences. *Phlebology* 2013; **28 Suppl** 1: 176-87.

4 Soudet S, Dakpe S, Le Gloan S — Thrombotic Complications in Venous Malformations: Are There Differences Between Facial and Other Localizations? *Clin Appl Thromb Hemost* 2020; **26**: 1076029620968143.