



ORIGINAL RESEARCH PAPER	Paediatrics
“AN UNCOMMON PRESENTATION OF A COMMON MALFORMATION: CASE OF LOW FLOW VASCULAR MALFORMATION – A CASE REPORT”	KEY WORDS: vascular, malformation, venous.

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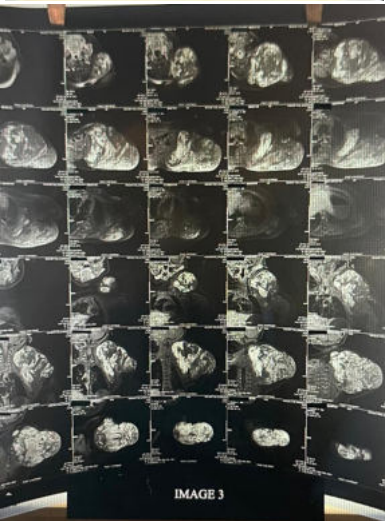
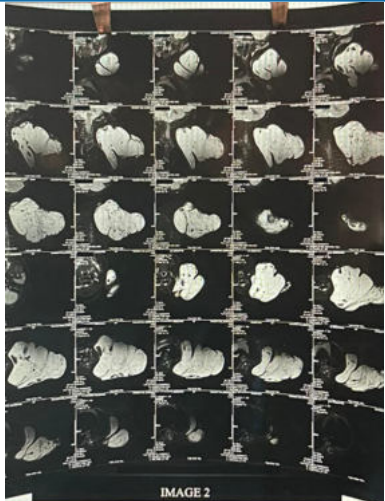
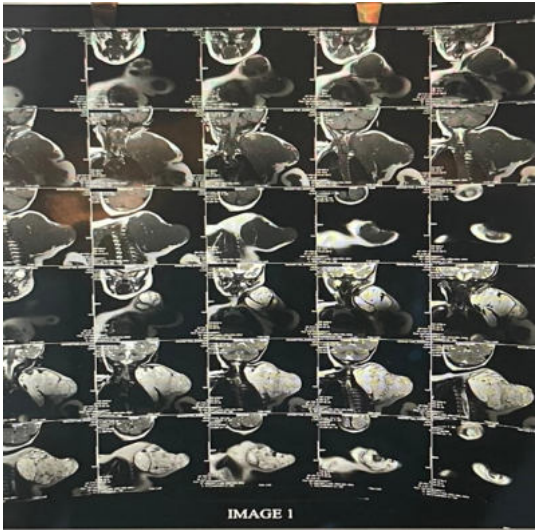
ABSTRACT	Venous malformation (VM) is a type of congenital vascular malformation (CVM) with an incidence of 1 to 2 in 10,000 and a prevalence of 1%. Venous malformations are ectatic venous channels found usually in the head, neck, limbs, and trunk which can be sporadic/familial inheritance [1-3]. We hereby would like to present this rare case of an uncommon presentation of a common malformation – low flow vascular malformation. This case report emphasizes the importance of medical management and the usage of Doppler ultrasound (US) and magnetic resonance imaging (MRI) as key imaging diagnostic methods. It also emphasizes that surgery is rarely required for these cases.
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CASE REPORT

9 month old female child born to a non- consanguineous married couple with birth history of NICU admission in view of mass on the left lateral and back of neck with up-to date immunization status, exclusively breastfed for 6 months and then initiated on complementary feeds with 66% gross motor delay was admitted in view of gradual increase in the size of the swelling on the left lateral and back of the neck since 9 months. There was no associated blood or mucoid discharge. On examination, there was an ill-defined mass (12x9 cm) on the left lateral and posterior aspect of the neck with firm to cystic consistency. It was not reducible or compressible with bluish vein visible through the overlying skin. There was no associated discharge.

Work Up For Tuberculosis Was Negative.

MRI neck and contrast revealed a large T2 hyperintense, T1 hypointense lesion measuring 12.4 x 9.8 x 9.9 cm (TR X AP X CC) with ill defined margins noted in subcutaneous and intermuscular plane of left lateral and posterior aspect of neck of chest - slow flow vascular malformation. Child was treated with oral propranolol and is on follow up with paediatric surgery.



DISCUSSION
 Lymphatic malformations (LMs), capillary-venulous malformations (VMs), glomovenous malformations, and non-

shunting mixed lesions are examples of low-flow malformations [1]. The most prevalent kind of low flow vascular malformation (CVM) is venous malformation (VM). They are present from birth and frequently cause pain and morbidity. Majorly inherited cutaneomucosal VMs (1%) and dominantly inherited and non-inherited glomuvenous malformations (5%), as well as sporadic VMs (94%), are the usual categories for VMs [2]. Childhood or early adulthood is when these deformities are most common. Although they can appear anywhere on the body, they are most commonly found in the extremities (40%) and trunk (20%), as well as the head and neck (40%) [3,4]. These deformities have a bluish appearance, a soft, compressible mass, and discomfort that may be felt in deep or superficial tissues [5,6]. There may be pulsatility, hyperemia, and a discernible local thrill. There are three types : mixed, macrocystic (large, more translucent subcutaneous masses in the neck, pelvis, or axilla), and microcystic small diameter locules [7]. The imaging test mostly uses Doppler US and MRI. Due to its usefulness in mapping the venous system, magnetic resonance angiography (MRA)/MRV has frequently taken the place of traditional angiography in diagnostic settings. MRI provides the most precise diagnosis for more complex lesions. Bleomycin, sclerotherapy or surgical excision are available treatment options. These patients need close observation while under anesthesia [8, 9]. After excision, long-term monitoring is preferred due to the potential for recurrence. Appropriate treatment of vascular abnormalities depends on a correct diagnosis. Pain, functional limitations, aesthetic impairment, ulcerations, bleeding, and thromboembolic events must all be addressed during treatment.

CONCLUSION

Since spontaneous involution happens in over 85% of individuals with hemangiomas, a "wait and observe" approach is warranted. Rapidly expanding hemangiomas that cause significant cosmetic deformity or that affect the gastrointestinal system, hearing, or vision must be treated [1-3]. Since its 2014 Food and Drug Administration approval, propranolol has been regarded as the first-line treatment. It inhibits the growth of endothelial vessels in hemangiomas [4,5]. It is given up to three times a day for at least a year at a systemic oral dose of 2 mg/kg bodyweight. Rarely are invasive treatments necessary [6-9]. This rare case of low flow vascular malformation highlights the importance of early diagnosis and regular follow up in preventing morbidity.

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