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CASE REPORTS

A RARE CASE OF A NEONATAL HAEMANGIOMA OF THE DISTAL PHALYNX

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ABSTRACT

Background: Vascular Mass lesions are uncommon but not rare and there have been reports of haemangiomas in different body areas. However, haemangioma of the tip of a finger haven't been reported previously. The significance of this condition lies in fact that it can cause disruption of circulation, digital growth retardation and development, platelet consumption, and morbidity. In infants and young children – can be a cause of significant distress because of mouthing or other issues which can cause bleeding risk.

Case: Here we report a case which was not diagnosed antenatally, the haemangioma was seen only at birth.

Conclusion: When dealing with haemangioma, especially on digital extremities careful considerations need to be undertaken on the vascular, orthopaedic, and medicinal effects, especially on a neonatal age group.

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KEYWORDS

newborn, haemangioma, distal phalanx.

ABBREVATION

IH – Infantile Haemangioma.

Introduction

Haemangiomas, also called as "strawberry marks", a benign tumour of infancy and are caused by proliferation of endothelial cells. Congenital haemangiomas are visible at birth whereas infantile haemangiomas appear later.[1] Haemangiomas are lesions originating congenitally due to faults in embryonic development. The mechanism is by the proliferation of endothelial cells.[2] Haemangiomas, present with a heightened risk of foetal anomalies along with foetal hydrops, polyhydramnios, perinatal morbidity and antenatal mortality. Here we are reporting a case of a newborn with a haemangioma of the distal phalanx of the left middle finger which was undiagnosed antenatally.

Case Report

A 2.76 Kg baby was born by elective LSCS given the previous section at 39 weeks gestation. Antenatally, the mother did not go through any triple test or any amniotic fluid sampling. The antenatal scans did not show any abnormalities. The APGAR score reading at the 1st and 5th minutes read 8 and 9 respectively. The haemangioma was noted at the delivery by the obstetrician and the neonatal doctor at delivery. The hemangioma (Figures 1-8) was dried gently and covered with wet gauze, examined for any breakage or bleeding (Figures 2, 3, 4) and the baby was handed over to the mother for skin-to-skin. It can be seen that the haemangioma was around 2 inches in diameter (Figure 3) and also spared the nail bed (Figures 4, 5, 6, 7).

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The case was discussed with the senior consultant neonatologist, the paediatric surgeon, and the dermatologist. A plan was made initially to perform a full blood count at 12 hrs of age and start the baby on propranolol however the parents elected not to start propranolol as they were not comfortable with the side-effects they read online, a screening ultasonogram of abdomen was undertaken for ruling out liver haemangiomas which were reported to be within normal limits without any haemangiomas. The baby was discharged at 48 hrs of life and was planned to follow up with a paediatrician and dermatologist to see the progress of haemangioma. A biopsy was not performed as it was decided it would not yield any additional results. The baby was followed up after 6 weeks and the haemangioma had shrunk to 60% of the size.

The baby was arranged to be seen again at 6 months - coinciding with the immunization schedule.

Discussion

Infantile haemangioma (IH) is one of the most common paediatric vascular tumour at around 5-10%.[1,2] The cellular mechanism leading to this condition is not clearly defined in literature but is thought to be represented by a deviant response of pluripotent stem cells to multiple stimulus in the form of hypoxia, hypercarbia and the renal renin-angiotensin system.[3] IH presents itself during the first month of life mainly in first 2-3 weeks and follows a distinctive natural progresssion with endothelial cellular proliferation and compounding involution.[3] The signs and symptoms depends on their distribution and the depth. It is classified into superficial, mixed, and deep IH and based on growth IH with minimal or no growth.[3] There is a correlation between multifocal IH

Figure 1. Haemangioma seen from palmar aspect.

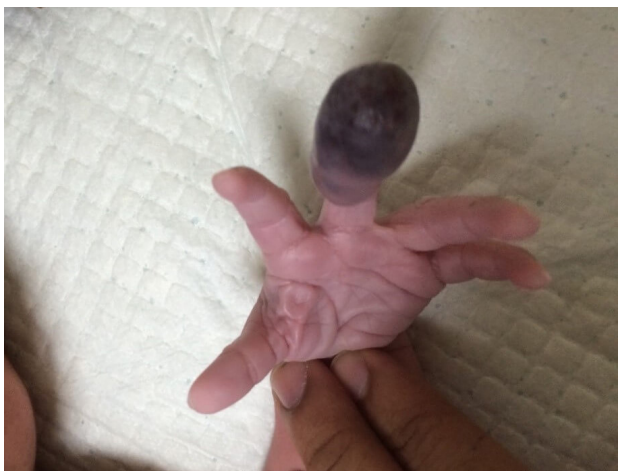


Figure 2. Haemangioma seen from palmar aspect showing full extent of size.

Figure 3. Haemangioma seen from dorsal aspect showing diamensions.

Figure 4. Haemangioma seen from dorsal aspect showing nailbed and nail.

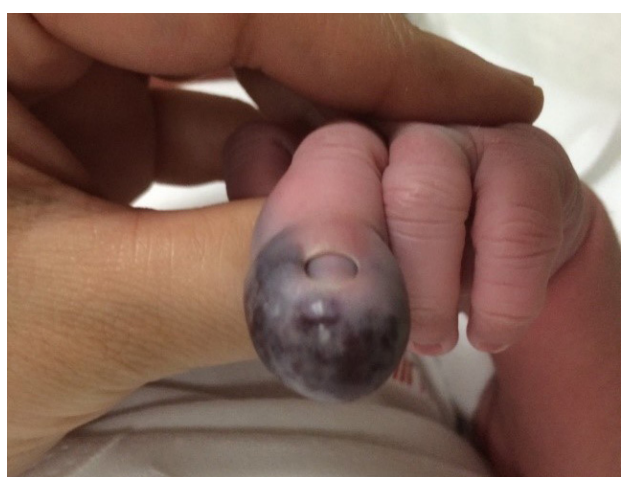


Figure 5. Haemangioma seen from dorsal aspect showing nailbed and nail in relation to finger.

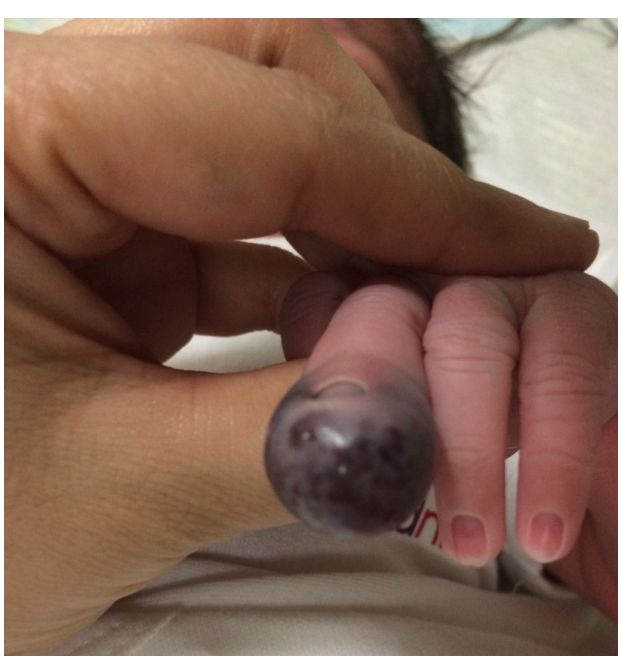


Figure 6. Haemangioma seen from grasp position showing nailbed and nail in relation to other fingers.

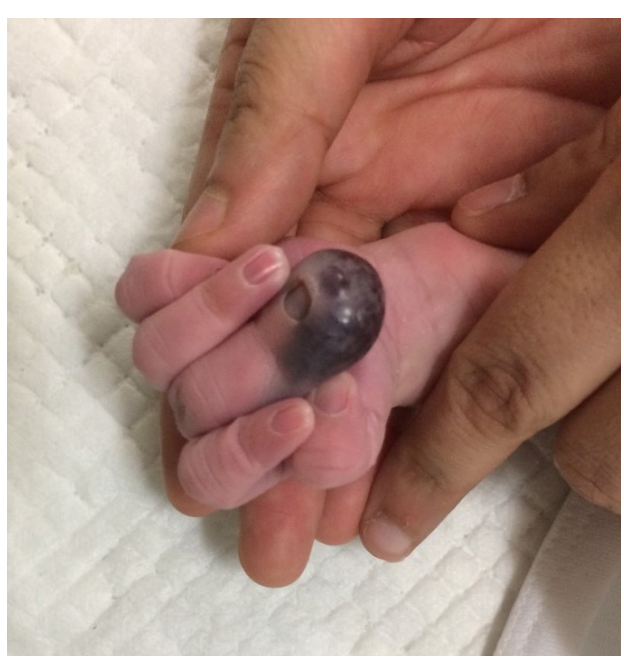
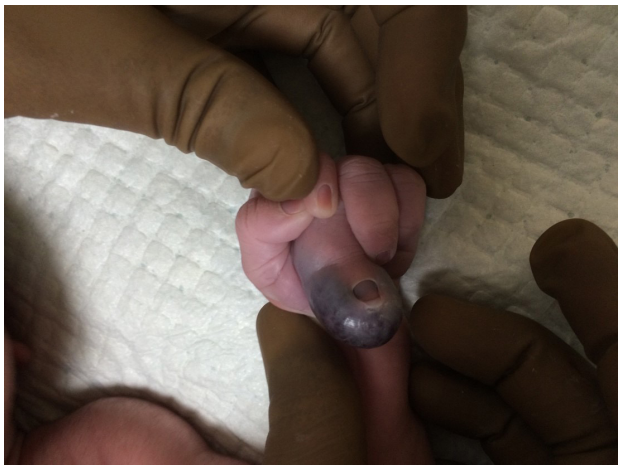


Figure 7. Haemangioma seen from dorsal aspect in comparison to an adult finger.



and hepatic hemangiomas in infant.[3] The most common practice for cut off is greater than 5 haemangiomas to ultrasound screen for hepatic hemangiomas.[4] If large haemangiomas are seen in facial proximity, it is advised to investigate for posterior fossa malformation, arterial vessel anomalies, cardiact defects such as coarctation of aorta and opthalmological anomalies as in PHACE syndrome[4] Lumbar haemangiomas should be investigated for LUMBAR Syndrome comprising of Lowerbody cutaneous IH, Urological and Genital anomalies, cutaneous ulceration, myelopathy, bone abnormalities and defects, anorectal and arterial malformations and renal anomaly.[5] The complications usually encountered with IH are ulceration, obstruction of urogenital tracts, visual obstruction, bleeding, hypothyroidism and cosmetic concerns. The differential diagnosis considered in IH are other vascular tumors and malformations, pyogenic granulomas, tufted angioma, kaposiform haemangioendothelioma, Kaposi sarcoma.[5,6] The Diagnosis is primarily clinical, one with biopsy used very rarely. Ultrasonogram can help with lesions located subcutaneously. Discussions and liaison with other specialities like dermatology and plastic surgery may me needed in certain cases

The treatment is mainly conservative.[7] The active treatment of IH involves use of propranolol and sirolimus. Active treatment is usually commenced with a review by a specialist prior to 5 weeks of age to discuss the risks involved. Propanolol can be started from an outpatient clinic and is generally started on a 1 mg/kg/ day in two divided doses and dose increases to a maintenance of 2 mg/kg/ day in 2-3 divided doses.[7,8,9,10] The treatment is to be reviewed every 2-3 months.[7] Treatment modalities such as atenolol is showing more promise in ongoing research. In lesions which are recalcitrant sirolimus may be used with liaison with other specialties.[8,9,10]

Compliance with Ethical Standards
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Conflict of Interest None

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