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# A Rare Case of Atypical Hemangioma Localization in a Neonate

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**Abstract** – This case report presents a preterm neonate born at 34 weeks of gestation with soft tissue hemangioma and transient tachypnea. Hemangiomas are typically congenital anomalies commonly seen in the pediatric population. These benign, highly vascularized, soft, sponge-like tumors can occasionally occur in atypical locations. Here, we report the clinical and radiological findings of a neonate with a hemangioma located at the intersection of the right inguinal and lateral proximal femoral regions, measuring approximately  $6\times8$  cm at the base with a height of 2-3 cm. This study discusses the clinical presentation and therapeutic approaches based on the current literature.

Keywords – Prematurity, Hemangioma, Transient Tachypnea Of The Newborn, Infant Of A Preeclamtic Mother, Thrombocytopenia.

#### I. INTRODUCTION

Angiomas are commonly encountered vascular tumors in the pediatric age group and can be classified histologically into hemangiomas, lymphangiomas, and hemangiopericytomas. Hemangiomas are benign tumors characterized by high vascularity and a soft, sponge-like consistency [1].

These lesions are compressible, shrinking under pressure and reverting to their original size upon release. They represent the most frequently encountered tumors during the first decade of life [2].

This report focuses on a preterm neonate born at 34 weeks of gestation presenting with respiratory distress and an atypical hemangioma located at the intersection of the right inguinal and lateral proximal femoral regions. The clinical characteristics, diagnostic findings, and therapeutic strategies for the case are discussed in light of current literature.

### II. CASE PRESENTATION

A male neonate weighing 1800 g was born via emergency cesarean section at 34 weeks of gestation due to maternal severe preeclampsia. The Apgar scores were 9 and 10 at the 1st and 5th minutes, respectively. Respiratory distress with subcostal and intercostal retractions was noted in the delivery room, and the neonate was transferred to the neonatal intensive care unit (NICU) with nCPAP support.

# A. Maternal History

The mother, a primigravida with hypothyroidism, was hospitalized at 33 weeks of gestation for severe hypertension, moderate thrombocytopenia, and oligohydramnios. Systemic corticosteroid therapy was administered at 33+5 and 33+6 weeks, and a platelet transfusion was given at 33+5 weeks due to thrombocytopenia. Blood pressure was controlled with antihypertensive therapy.

### B. Neonatal Examination

The initial physical examination revealed:

- Respiratory rate: 72/min, with bilateral crepitant rales, subcostal, and intercostal retractions.
- Cardiovascular system: Normal with equal bilateral peripheral pulses.
- Abdomen: No organomegaly.
- Extremities: Normal.
- A hemangioma-like lesion was observed at the right inguinal-lateral proximal femoral junction, measuring approximately 6×8 cm at the base and 2–3 cm in height.



Figur 1: Our patient's atypically located hemangioma

## C. Laboratory Findings

- **Initial Results**: WBC: 4,100/mm<sup>3</sup>, Hb: 17.8 g/dL, PLT: 183,000/mm<sup>3</sup>, blood gas: pH 7.33, pCO<sub>2</sub> 50 mmHg, HCO<sub>3</sub> 24 mmol/L, lactate 1.3 mmol/L.
- Coagulation Parameters: APTT: 35.5 sec, PT: 14.8 sec, INR: 1.48.

# D. Imaging Studies

- Chest X-Ray: Findings consistent with transient tachypnea of the newborn.
- **Transfontanel Ultrasound**: No evidence of hemorrhage, shift, edema, or malacic changes; cerebrospinal fluid spaces were normal.

• **Soft Tissue Ultrasound**: A heterogeneously structured, poorly defined mass measuring 6×7×3 cm with mixed vascular flow (suggestive of hemangioma) was observed in the anterior region of the right thigh.

The family was informed of the condition, and the neonate was referred to a tertiary center specializing in pediatric hematology for further evaluation and management due to the atypical localization of the lesion.

### III. DISCUSSION

Hemangiomas are commonly identified at birth or shortly after, predominantly in the head and neck region, with less frequent occurrence in the trunk and extremities [3].

While typically asymptomatic, they can sometimes lead to functional impairments or life-threatening complications such as airway obstruction or significant bleeding [4].

Medical treatment aims to reduce tumor size, with options including corticosteroids, vincristine, interferon-alpha, cyclophosphamide, and propranolol. Of these, propranolol has emerged as a first-line therapy due to its efficacy and lower side-effect profile, particularly during the tumor's proliferative phase [5].

Surgical or invasive interventions, such as laser therapy or tracheotomy, are reserved for cases where medical management fails or complications arise [6].

#### IV. CONCLUSION

Hemangiomas are the most common pediatric tumors and often regress spontaneously. However, those causing cosmetic or functional issues require timely intervention. Propranolol has been established as an effective and safer alternative to traditional therapies for managing infantile hemangiomas, particularly during their proliferative phase.

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### **REFERENCES**

- [1] Haytoğlu S, Kuran G, Kadıköylü S, Dengiz R, Arıkan OK. *Giant Submandibular Cavernous Hemangioma as a Neck Mass: A Case Report.* Adana Numune Training and Research Hospital Medical Journal. 2013;1(1):41-44.
- [2] Doğan R, Korkut AY, Eren SB. Intramasseter Hemangioma. Turkish Archives of Otolaryngology. 2012;50(3).
- [3] Torun YA, Ergül AB, Dursun İ. *Propranolol as a First-Line Treatment for Infantile Hemangioma*. Dicle Medical Journal. 2011;38(1):95-97.
- [4] Akduman D, Solmaz F, Haksever M, Döner F. A Giant Hemangioma of the Tongue Causing Dysphagia and Dysarthria. ENTCase. 2015;1:57.
- [5] Paradiso MM, Shah SD, Fernandez Faith E. Infantile Hemangiomas and Vascular Anomalies. Pediatr Ann. 2024 Apr;53(4):e129-e137. doi: 10.3928/19382359-20240205-04. Epub 2024 Apr 1. PMID: 38574074.

[6] Tian X, Yu D, Zhao X. Multidisciplinary Treatment of a Giant Maxillofacial Congenital Hemangioma With Multiple Severe Complications. J Craniofac Surg. 2023 Jun 1;34(4):e385-e387. doi: 10.1097/SCS.0000000000009317. Epub 2023 May 9. PMID: 37157121.