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Olgu Sunumu

Noninvoluting congenital hemangioma in a term neonate

Term bir yenidoğanda gerilemeyen konjenital hemanjiom

Zübeyde KILINÇ, Şahin HAMİLÇIKAN, Abdurrahman ÖZEL, Feyza COŞKUN, Emrah CAN

Bağcılar Eğitim ve Araştırma Hastanesi, İstanbul

ABSTRACT

Congenital hemangiomas are rare benign vascular tumors. The approach to the management of congenital hemangiomas (CH) must be based upon the tumor size and location, its tendency to spontaneous involution, and presence of local or systemic complications. We presented this report noninvoluting case of congenital hemangioma just below the elbow of the right arm.

Key words: Hemangioma, neonate, congenital

ÖZ

Kongenital hemanjiomlar ender görülen benign vasküler tümörlerdir. Konjenital hemanjiomlarda tedavi yaklaşımı tümörün yeri, boyutu, kendiliğinden gerilemesi ve sistemik veya local komplikasyonların varlığına gore yapılmalıdır. Burada sağ dirsek hemen altında gerilemeyen bir konjenital hemanjiom olgusu sunulmuştur.

Anahtar kelimeler: Hemanjiom, yenidoğan, konjenital

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Yazışma adresi: Doç. Dr. Emrah Can, Bağcılar Eğitim ve Araştırma Hastanesi, 34200 Bağcılar / İstanbul
e-mail: canemrahcan@yahoo.com

INTRODUCTION

Vascular lesions, including vascular neoplasms and vascular malformations, are common in newborns [1] whereas congenital hemangiomas (CH) occur rarely. Unlike infantile hemangiomas, with precise plaques and a proliferation phase, congenital hemangiomas are fully grown at birth. Based upon their natural history, two major subtypes of congenital hemangiomas have been recognized: rapidly-involuting congenital hemangiomas (RICH) and non-involuting congenital hemangiomas (NICH) [1,2]. Herein, we report a case of non-involuting congenital hemangioma.

CASE REPORT

A neonate was born to a 30 year-old mother at 39th gestational week, via an uncomplicated repeat caesarean-section. APGAR scores were 9 and 10 at 1st and 5th minutes respectively. Mother was not followed up during pregnancy. Physical examination revealed an exophytic mass on her right arm just below the elbow, with a size of 4x4x3 cm (Figures 1 and 2). The soft mass was surrounded by a pale halo and had telengiectasias on its surface. Therefore it was considered as a congenital hemangioma. In ultrasonographic investigations, 38x15 mm sized, hype-

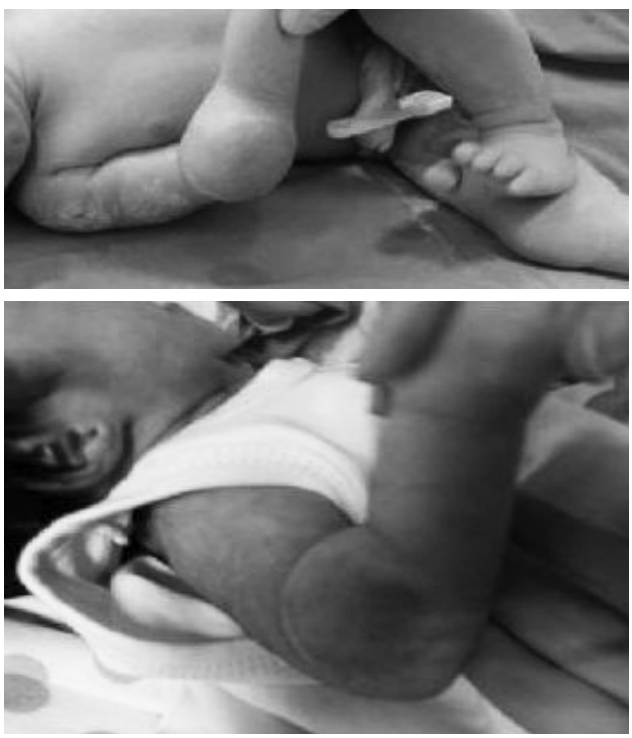

Figure 1-2. Exophytic mass on the right arm, with a size of 4x4x3 centimeters.

rechoic solid mass was seen and increased arterial and venous flow through the mass was detected during Doppler US. Both findings were compatible with the diagnosis. Cranial and abdominal ultrasonography showed no other vascular lesions. No sign of anemia and thrombocytopenia was detected during laboratory work-ups. The neonate was discharged and received outpatient follow-up. At her first month control visit, she was healthy and gained enough weight. The size and texture of the hemangioma remained the same, whereas pale halo surrounding the mass increased in diameter. Though one month follow-up is not sufficient for definite diagnosis, we believe our case is an example of a non-involuting congenital hemangioma for there was no reduction in size. The patient was consulted with plastic surgery and dermatology and diagnosis of non-involuting hemangioma was confirmed by both specialists.

DISCUSSION

Congenital hemangiomas (CH) are fully grown at birth and usually present as solitary, plaque-like or exophytic lesions of size varying from a few centimeters to more than 10 centimeters. The observation of a rapid involutive process beginning within the first days or weeks of life allows the distinction to be made between rapidly involuting congenital hemangiomas (RICH) and non-involuting congenital hemangiomas (NICH). In most cases, the diagnosis of CH is made clinically in a newborn presenting with a fully grown soft-tissue mass with overlying telangiectasias and peripheral vasoconstriction. The presence of the tumor at the time of birth is an important clue to the diagnosis and also an important criterion for differentiating CH from infantile hemangiomas, which usually are not clinically evident at the time of delivery [1,3]. The observation of a rapid involution starting a few days after birth is usually sufficient to differentiate rapidly involuting CH (RICH) from noninvoluting CH (NICH). Though one month follow-up is not sufficient for definite diagnosis of "non-involuting CH", some authors suggest that, to detect non-involution in the lesion even a few weeks after the birth is sufficient to make diagnosis of NICH [4]. In our case, during the follow-ups, there was no reduction in the size of the hemangioma so NICH was considered as primary diagnosis.

NICHs are well-circumscribed round to oval, pink to blue-red or purple plaque-like or bossed soft tissue masses [2]. Overlying telangiectasias and a rim of pallor are characteristic findings. NICHs are typically flatter than RICH. Two morphologic variants have been described: a patch type, characterized by a flat or slightly atrophic surface resembling a vascular stain; and a nodular/plaque type associated with prominent tissue swelling [5].

On ultrasonography, both RICH and NICH show a predominantly heterogeneous sonographic structure, diffuse vascularity, hypervascularity, and, occasionally, calcifications [6]. Doppler examination reveals a high-flow vascular lesion [5]. In involuting lesions, long, tortuous, and compressible channels with a venous flow signal become a dominant feature [6]. Laboratory blood tests are not routinely performed in infants with small, uncomplicated congenital hemangiomas. Our case's laboratory results showed no pathology. NICH does not resolve with time, but treatment is not necessarily needed if they remain asymptomatic and do not bother the patient [2]. In cases where treatment is indicated, pulsed dye laser may help diminish superficial discoloration. For larger, thicker, or more symptomatic lesions, surgical excision is the treatment of choice. In a series of 53 patients (age 2 to 30 years) with NICH, 28 underwent surgical excision [2]. Preoperative arterial embolization was performed in seven patients. Any intra-operative or post-operative complications were not reported. The optimal timing for surgical excision has not been determined. Most experts recommend surgical excision during the preschool age, when the child begins to manifest a facial or body image [7].

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