

Fibromatosis colli- pseudotumor of infancy of sternocleidomastoid ---a case report**Samra Tahseen¹, Sadaf Nasir², Faridah Amin³**^{1,2} *Department of Radiology, Liaquat National Hospital, Karachi., Pakistan*³ *Department of Family Medicine, Liaquat National Hospital, Karachi, Pakistan***ABSTRACT**

Fibromatosis colli- pseudotumor of infancy of sternocleidomastoid is a fibromatosis of infants that involves the sternocleidomastoid muscle. It usually presents in neonates and/or infants. If diagnosed correctly & on time, undue fears of parents and unnecessary investigations can be avoided. Its management is though Conservative, Physiotherapy is usually advised to speed up the recovery & to minimize the complications like torticollis. Ultrasonography (USG) is the imaging modality of choice for diagnosis. Cross sectional imaging like CT scan or MRI may help to further delineate the disease and to know the extent of muscle involvement. Here, we present a case of an 18-days old baby boy came with complains of right sided neck swelling noticed by parents for a week. The swelling was not present at the time of birth.

Keywords: Fibromatosis colli, Pseudotumor of infants, Sternocleidomastoid muscle (SCM).

Introduction

The word '*FIBROMATOSIS*' stands for *abnormal hyperplasia of fibrous tissue* & '*Colli*' – for the neck. It is a rare cause of benign neck swelling in neonates & infants, which may progress to congenital torticollis, if gets complicated. Patients typically present in first month of age with a unilateral neck mass, with or without torticollis. The exact etiology of the disease is unknown, it most likely occurs after any birth trauma e.g., forceps delivery/ vaccum delivery or malpositioning in the intrauterine life [1-3]. The disease is more commonly observed in boys. It is slightly more common on right side. Pseudotumors of sternocleidomastoid are rarely seen bilaterally [4].

Case report

An 18 days old baby boy, delivered by Caesarian section, presented to the Family Medicine Department with complains of right sided neck swelling. The

mother noticed this swelling for a week. The child was otherwise healthy. Parents were very worried for the swelling of the neck as they had the child after 10 years of their marriage. Family history was unremarkable for childhood lymphoma or tuberculosis. Physical examination demonstrated mild, non tender, firm swelling over right side of neck. There was no restriction of movement on affected side. The child was referred to Radiology department for his neck ultrasound. USG was performed on GE LOGIQ P6 machine using a high frequency linear probe (frequency 12MHz) .Scanning showed diffuse thickening of sternocleidomastoid muscle on the right with heterogenous echotexture. No vascular invasion or bony involvement was seen (Fig 1). Left sternocleidomastoid muscle appeared normal (Fig 2). On CDI, no abnormal vascularity was noted on either side. Few subcentrimetric benign looking cervical lymph nodes were noted bilaterally. Based on these USG features and the clinical correlation, a diagnosis of fibromatosis colli or pseudotumor of the sternocleidomastoid muscle was considered. The Family Physician advised mild neck stretching physiotherapy to the child & the parents were counselled accordingly.

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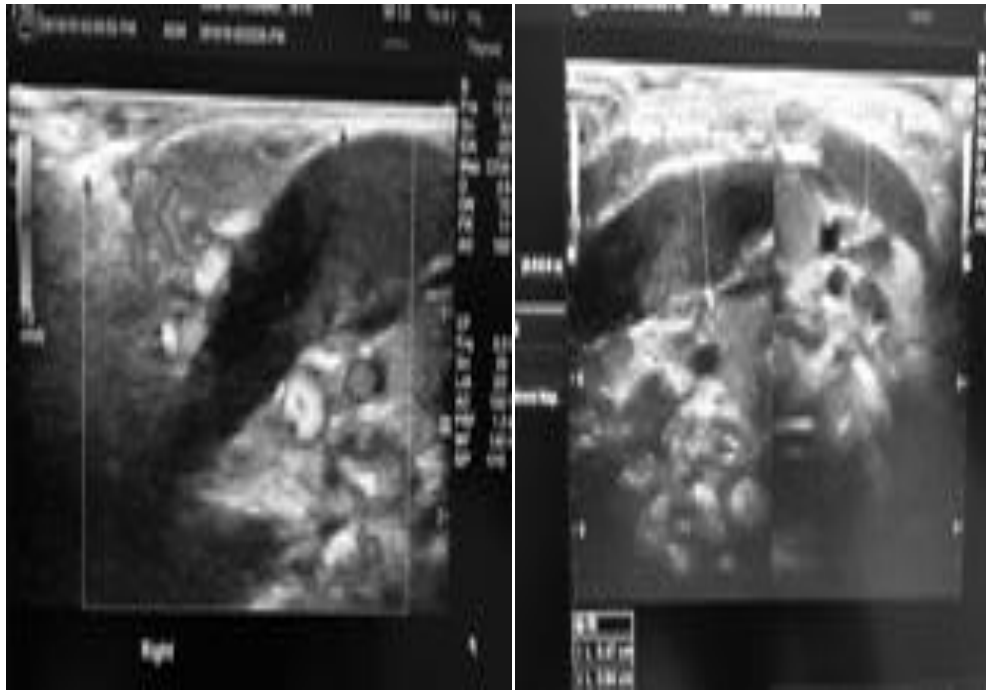


Fig 1: Longitudinal USG image of the neck: Diffuse fusiform enlargement of the right sternocleidomastoid muscle

Fig 2: Longitudinal USG image of the Neck: Comparison of right SCM with normal muscle on the left.

Follow up scan of the child done after 06 weeks interval. There was significant reduction noted in the thickness of the sternocleidomastoid(SCM) muscle. The echotexture of the muscle also becomes homogenous. The findings suggestive of quick recovery of the benign disease, Fibromatosis Colli.



Fig 3: Longitudinal USG image of the neck: Follow up scan of right and left Sternocleidomastoid muscles showing significant reduction in size and echotexture of right (SCM) muscle

Discussion

Fibromatosis colli is a benign fusiform mass arising from the sternocleidomastoid muscle mostly seen in the anterior neck. Presentation, clinical examination and sonographic findings are usually characteristic, and the diagnosis is made based on these findings. The infants present with unilateral painless swelling & are otherwise healthy. A history of birth trauma, such as breech presentation, forceps delivery, or difficult labour is common. Traumatic compression of the venous outflow of the neck muscle (SCM) during labour may result in edema in the muscle, degeneration of muscle fibers, and then, fibrosis of the muscle. Ultrasound is an ideal & safe modality to diagnose which shows focal or diffuse thickening of the sternocleidomastoid muscle (SCM) on the affected side in contrast to the normal contralateral side. The affected muscle may be homogeneous or heterogeneous in echotexture. The fibrillar structure of the muscle fibers is, however, usually maintained. There is usually no associated cervical lymphadenopathy and no vascular invasion or bony involvement as may be seen with other inflammatory or malignant neck masses [5]. FNAC of the lesion is rarely recommended, which shows bland-appearing fibroblasts and degenerative atrophic skeletal muscle cells and parallel clusters of fibroblasts in a clean background, confirming the disease as benign entity [6]

Conclusion

Ultrasound is the ideal modality to correctly diagnose this rare disease, Fibromatosis Colli. A radiologist must be aware of this benign entity to differentiate it from

other diseases so that other unnecessary investigations are avoided.

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