

Fibromatosis Colli : A rare cause of neonatal torticollis

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ABSTRACT

Fibromatosis colli is a rare cause of benign neck masses in neonates and infants. If diagnosed correctly, unnecessary investigations can be avoided. We report the case of a 1-month-old boy who was born at term in good general conditions. At the age of 3 weeks, his mother noticed a mass on the left side of his neck. Ultrasound examination of the neck showed a well-defined fusiform thickening of the left sternocleidomastoid muscle. The diagnosis of fibromatosis colli was made. No treatment was prescribed. A spontaneous regression of the swelling was notified after three months.

Key words: Fibromatosis colli, Infant, Congenital Torticollis, Ultrasonography.

INTRODUCTION

Fibromatosis colli is one of the most frequent causes of the neonatal torticollis, it is a benign fibrous mass developed from the sternocleidomastoid muscle. The exact etiopathogeny remains unknown. Ultrasonography of neck is the imaging modality of choice. Its management is in most cases based on physiotherapy. We present a case report where fibromatosis colli was diagnosed using ultrasonography.

CASE REPORT

We report the case of a 1-month-old boy who was born at term in good general conditions. Parents didn't report a history of trauma, neonatal infection or a family history of tumour pathology.

At the age of three weeks, his mother noticed a mass on the left side of his neck. Physical examination found an obvious torticollis with a painless firm swelling of approximate size 1 cm × 2 cm located in the lower portion of the left sternocleidomastoid muscle (Figure 1), the rest of the examination found no other malformation.



Figure 1 : Neck swelling on the left side

Ultrasound examination of the neck showed a well-defined fusiform thickening of the left sternocleidomastoid muscle which was suggestive of the diagnosis of fibromatosis colli. No treatment was prescribed and simple monitoring with postural manoeuvres was recommended with regression of swelling within 3 month-follow up (Figure 2).



Figure 2 : Disappearance of the swelling after two months

DISCUSSION

Fibromatosis colli was, initially, described by Hulbert as a congenital muscular torticollis [1]. It is a benign tumour of the sternocleidomastoid muscle classified as a benign fibroblastic proliferation according to the WHO classification [2].

The reported incidence is of 0.4% of live births with no sex predominance [3,4]. It is often unilateral and rarely bilateral [5] and seems to affect the right side more frequently [6].

This tumour often appears between the 1st and the 8th week of life, it initially increases in size, then stabilizes and regresses towards the 4th -8th month [3]



The ethiopathogeny of fibromatosis colli is controversial. Although an association with birth trauma has been suggested, other theories were reported such as intrauterine malposition, laborious delivery, the use of forceps, and breech presentation [7].

Diagnosis of fibromatosis colli is crucial to avoid further impairments, including plagiocephaly, scoliosis, and permanent loss of neck mobility. Diagnosis is, essentially, based on history and clinical examination, however radiological examination is often necessary to rule out differential diagnoses such as lymphadenopathy, branchial cyst, rhabdomyosarcoma, Neuroblastoma, lipoma, and vascular malformation [8].

Ultrasonography is the preferred imaging tool because it is inexpensive, non-invasive and sensitive. fibromatosis colli appears as a fusiform focal or diffuse enlargement of the sternocleidomastoid muscle which may appear homogeneous or heterogeneous [9].

Computed tomography (CT) and magnetic resonance imaging (MRI) are required in case of diagnostic doubt and can also highlight the thickening of the sternocleidomastoid muscle. But they are expensive, not easily accessible, with the risk of radiation exposure and the possible need for general anaesthesia [10].

Fine needle aspiration (FNA) is advocated by some teams; fibroblasts are found in the cytology surrounded by colla-

gen with atrophic muscle fragments [7,11]. Nevertheless, FNA is not tolerated by neonates with a risk of hematoma that can worsen the symptomatology [4].

The treatment consists in reassuring parents, observation and physiotherapy [12].

After one-year, if physiotherapy fails, surgical treatment is performed and consists of tenotomy, excision of mass and muscle all around [4,12,13].

Recently, botulinum toxin injection has been used to avoid surgery. However, at present there is limited literature available concerning issues of dose, injection technique/safety, and the possible acute to longterm complications [7,13,14].

CONCLUSION

Fibromatosis colli is a rare entity which diagnosis is based on clinical and radiological finding in order to eliminate other causes of torticollis, and its management is well codified. The spectrum of available treatment ranges from conservative management and home exercise programmes to various surgical procedures. With appropriate management, the prognosis is good.

Conflicts of interest: Authors declared no conflicts of interest.

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