



A Cervical Mass In The Neonate (Fibromatosis Coli): A Case Report

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ABSTRACT

Fibromatosis Colli is an uncommon benign condition that presents in infancy as a mass in the anterior portion of the neck, related to sternocleidomastoid (SCM) muscle. It is self-limiting lesion. In some cases, torticollis may be present. We present a case report of fibromatosis colli in an eight weeks old neonate diagnosed by using high frequency ultrasound prob.

Keywords: *Fibromatosis Colli, sternocleidomastoid muscle, torticollis, high frequency ultrasound probe*

INTRODUCTION

Fibromatosis colli is an abnormal protuberance projected as a mass in the SCM muscle in neonate^{1,2}. It is a benign proliferation of fibrous tissue within SCM muscle, it could be appeared as focal or diffuse enlargement.

This swelling mostly involves the central part of the muscle with resultant shortening; therefore, the chin is turned away from the affected side¹. Birth trauma or malposition of the fetus could be the cause but still the main etiology is not well known^{2,3,4}.

It may affect boys more than girls in a prevalence of 0.4 for all⁵. Wondering if fibromatosis coli affect both side (bilateral) or unilateral? The mass is usually unilateral and more common on the right side. It is firm and painless measuring a few centimeters in diameter. It appears in the newborn, usually between the second and fourth weeks of life^{3,5,6}.

The shorting of SCM muscle which happened due to Fibromatosis colli causing bending of neck (torticollis) in approximately 14-20% of cases as a complication , and its considered the

most common cause of congenital muscular torticollis^{2,5,7}.

The most useful way for diagnosis is by ultrasonography with a sensitivity of 100 %⁵ & it is easily performed & painless^{1,2,5-8}. The fibromatosis colli usually gets resolved on its own over a period of 4-8 month and usually does not require any intervention except for physiotherapy⁷. Tenotomy of the SCM muscle is required in less than 10% of cases. The Botulinum toxin type A can be used in resistant cases which decreased the need for surgery¹.

Case report

An 8 weeks old boy infant presented with neck swelling on the right side which seems to be related to the SCM muscle. The swelling was hard in consistency and neither warm nor tender to touch. The patient was afebrile. There was a restriction of neck movement on the affected side. The mother was delivered by cesarean section of breach presentation.

Ultrasonography revealed a fusiform thickening of the right SCM muscle with a well-defined

margin mass (2.4 x 1.2 cm) at the central part of the muscle.

The mass was oval in shape with mixed echogenicity. The laminated appearance of the muscle fiber however was preserved (figure 1). No abnormal internal vascular marking was noted. There was no cervical lymphadenopathy and normal looking left SCM muscle. Based on these ultrasonographic features and the clinical findings, a diagnosis of Fibromatosis colli was made.

DISCUSSION

Fibromatosis coli is considered as a rare cause of a benign fibrous tissue proliferation (pseudotumor) ¹. It happened mostly unilateral, bilateral involvement is rare^{1,2}. right SCM muscle more affected than left side in 75% of cases ⁹. Approximately 0.4 % of all live births have fibromatosis coli. Its etiology is not well known but could be due to injury of the SCM muscle in last trimester or during delivery^{1,2,3,4}, that is because intra-uterine mal position causing injury to SCM muscle as there was no history of birth trauma or difficult labour.

Patients present as enlarging neck mass with limitation of neck movement otherwise normal, at around 14-28 days after birth^{1,3}.

High frequency ultrasonography is the best way for diagnosis, given its lower cost, availability, and avoidance of radiation and sedation^{1,9}.

The appearance is usually pathognomonic⁹. It typically demonstrates generalized or localized fusiform thickening of SCM muscle. The thickened muscle appearance varies in echogenicity & homogeneity ^{9,10,11} with well-defined margin¹. Comparison with the other normal SCM muscle is very helpful⁹.

The variations of the appearance of fibromatosis colli should not prevent the correct diagnosis as long as the abnormality is intramuscular and the surrounded soft tissues are normal¹¹.

CONCLUSION

In view of its mostly self-limiting nature, the recognition of Fibromatosis colli as a cause of neck mass in neonates using high frequency ultrasonography, is important and would help decrease unnecessary investigations.

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FIG 1: mass like appearance involving the belly of the muscle