

Congenital Fibromatosis Colli in a Newborn: A Rare Neck Mass Mimicking a Tumor: Case Report

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Abstract

Case Report

Background: Fibromatosis colli is a rare benign condition in neonates characterized by the enlargement of the sternocleidomastoid muscle (SCM), typically following birth trauma. It can raise concern due to its presentation as a cervical mass. **Case Presentation:** We report the case of a 5-day-old male newborn, born to a primigravida mother after a difficult delivery. A firm, non-tender, left-sided neck swelling was noted from birth. Cervical ultrasound revealed a fusiform enlargement of the left SCM with preserved fibrillar structure, consistent with fibromatosis colli. **Conclusion:** Fibromatosis colli is a self-limiting condition and should be considered in neonates presenting with lateral neck swelling, particularly after complicated deliveries. Ultrasound remains the diagnostic tool of choice. Early physiotherapy can prevent complications such as congenital torticollis.

Keywords: Fibromatosis colli, sternocleidomastoid muscle, neonatal neck mass, birth trauma, ultrasound, congenital torticollis.

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INTRODUCTION

Fibromatosis colli, also known as sternocleidomastoid pseudotumor of infancy, is a rare benign fibroblastic proliferation involving the SCM muscle. It typically presents in the first few weeks of life as a firm neck mass. The condition is believed to result from birth trauma, such as a difficult vaginal delivery or instrumental extraction, leading to muscle injury and subsequent fibrosis. Although alarming to parents, this condition is self-limiting and has an excellent prognosis with conservative management. We present a new case of fibromatosis colli in a neonate, emphasizing clinical and imaging findings, and the importance of early recognition to prevent long-term complications.[1]

CASE PRESENTATION

A 5-day-old male newborn was referred to our department for evaluation of a neck mass. He was born

at term via a dystocic vaginal delivery. It was the first pregnancy of a healthy 26-year-old mother with no significant antenatal complications. No instrumentation was used, but the delivery was prolonged and required obstetric maneuvers. On examination, the infant had a firm, renitent, non-pulsatile swelling in the left lateral neck, overlying the SCM muscle. There was no sign of inflammation or limitation in neck movement at this stage. An ultrasound of the neck was performed, showing a fusiform enlargement of the left SCM muscle with preserved echogenicity and normal muscle fibers, suggesting fibromatosis colli. No cystic or vascular features were present. No further imaging was deemed necessary. A diagnosis of fibromatosis colli was made. The patient was referred for early physiotherapy focused on passive stretching exercises and monitoring. The parents were reassured about the benign and self-limiting nature of the condition. Follow-up at two months showed regression of the mass and normal head positioning without signs of torticollis.



Figure 1: Left lateral neck swelling in a 5-day-old newborn, located along the anterior border of the sternocleidomastoid muscle. The mass is firm, non-inflammatory, and consistent with fibromatosis colli

DISCUSSION

Fibromatosis colli, also known as pseudotumor of the sternocleidomastoid (SCM), is a benign fibrous lesion that typically occurs within the first few weeks of life. Its exact pathophysiology is not fully understood, but the condition is strongly associated with obstetric trauma, particularly prolonged labor, breech presentation, and instrumental deliveries. This trauma is thought to cause muscle ischemia and localized necrosis, resulting in fibrous replacement and hypertrophy of the affected SCM muscle.

Clinically, fibromatosis colli presents as a unilateral, firm, non-tender mass localized to the SCM muscle. It is more commonly observed on the left side, possibly due to intrauterine positioning [2]. The mass usually appears within the first 2–4 weeks after birth and may be associated with restricted neck motion, sometimes progressing to congenital muscular torticollis if untreated. Early identification is critical to prevent long-term sequelae such as plagiocephaly or facial asymmetry.[3]

Ultrasonography remains the gold standard for diagnosis. It is a safe, non-invasive, and widely available modality that typically reveals a fusiform enlargement of the SCM with preserved fibrillar echotexture. This sonographic appearance helps differentiate fibromatosis colli from other neck masses in neonates, including lymphadenopathy, cystic hygroma, hemangioma, and neoplastic lesions.

Management is conservative in nearly all cases [3]. The primary approach is early initiation of physiotherapy, focusing on gentle passive stretching and positioning exercises. With appropriate treatment, the mass usually regresses over weeks to months, and neck mobility is fully restored. Serial follow-up is essential to monitor response to therapy and ensure complete resolution.

Surgical intervention is exceptionally rare and reserved for cases with persistent torticollis or failure of conservative measures. Parental reassurance is also crucial, as the appearance of a neck mass can be distressing. Educating caregivers about the benign nature and excellent prognosis of fibromatosis colli is a key component of management.

This case illustrates the classical presentation and natural evolution of fibromatosis colli in a newborn following a difficult delivery. It underscores the importance of considering this diagnosis in any neonate presenting with a lateral neck mass, especially in the context of birth trauma.[4]

CONCLUSION

Fibromatosis colli is a benign, self-limiting condition of infancy that should be considered in the differential diagnosis of lateral neck masses in neonates, especially following difficult births. Prompt diagnosis using ultrasound and early physiotherapy are essential for favorable outcomes and prevention of complications such as muscular torticollis.

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