Journal of african clinical cases and reviews / Journal africain des cas cliniques et revues

www.jaccrafrica.com ISSN 1859-5138 Open access

Clinical case

Fibromatosis colli or congenital muscular torticollis: a case report

Fibromatosis colli ou torticolis musculaire congénital : à propos d'un cas

AC Sall*[1], I Niang[2], N Ndour[3], AD Faye[4], C Ndiaye[5], A Sy[1], M Ndiaye[1]

Résumé

Le fibromatosis colli est une prolifération bénigne du tissu fibreux du muscle sternocléidomastoïdien, conduisant à une tuméfaction du muscle. Il est souvent associé à un torticolis néonatal. L'étiologie est inconnue. L'imagerie médicale en particulier l'échographie joue un grand rôle diagnostic. Son traitement est essentiellement conservateur. Nous rapportons un cas d'un nourrisson diagnostiqué par l'échographie et confirmé par l'histologie.

Mots-clés : Fibromatosis colli, Muscle sterno-cléido-mastoïdien, Nourrisson, Echographie.

Abstract

Fibromatosis colli is a benign proliferation of fibrous tissue of the sternocleidomastoid muscle, leading to muscle swelling. It is often associated with neonatal torticolis. Etiology is unknown. Medical imaging in particular ultrasound plays a big diagnostic role. His treatment is essentially conservative. We report a case of an infant diagnosed by ultrasound and confirmed by histology.

Keywords: Fibromatosis colli, Sterno-cleido-mastoid muscle, Infant, Ultrasound.

Introduction

Fibromatosis colli, or infantile tumor of the sternocleidomastoid muscle, is a benign proliferation of the fibrous tissue of the sternocleidomastoid muscle, leading to localized or diffuse swelling of the muscle. It is often associated with neonatal torticollis. The etiology is unknown, but ischemia of the muscle related to obstetrical trauma has been suggested [1, 2]. Medical imaging, particularly ultrasound, plays an important diagnostic role. It helps to rule out other causes of cervical masses in newborns and avoid unnecessary further investigations [1,2,3]. We report a case of fibromatosis colli, through which we will discuss the diagnostic and therapeutic aspects of this pathology.

Clinical case

This was a 3-month-old male infant who had been referred to ENT for right cervical swelling. The child was born at term by vaginal delivery without complications. The parents had noticed the swelling

for about a month prior to the consultation. Clinical examination revealed a firm, painless, non- inflammatory mass fused to the left sternocleidomastoid muscle, with healthy skin opposite (figure 1). The mass did not restrict cervical movement. Cervical ultrasonography revealed a heterogeneous fusiform thickening of the right sternocleidomastoid muscle, with a loss of fibrillar appearance without inflammatory character on color Doppler (figure 2). Cytopuncture of the mass revealed a benign conjunctival lesion. The diagnosis of fibromatosis colli was accepted, and physiotherapy consisting of head rotation on the side of the lesion when the child was supine was proposed. The evolution was favorable, with progressive regression of the swelling at 5 months.



Figure 1: Right laterocervical swelling

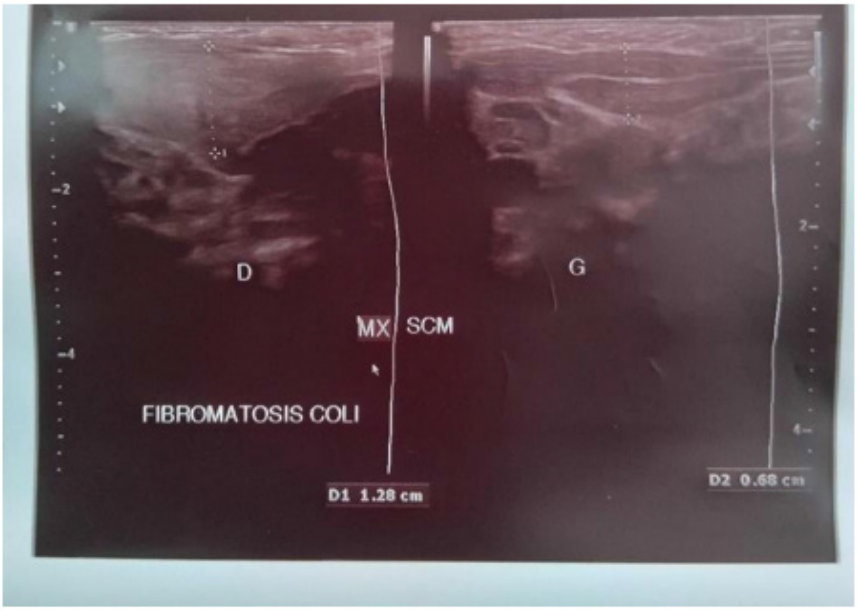


Figure 2: Ultrasound section showing heterogeneous fusiform thickening of the right sternocleidomastoid muscle

Discussion

Fibromatosis colli, also known as congenital muscular torticollis, is a benign fibroblastic proliferation of the distal sternocleidomastoid muscle in infants [1]. Usually unilateral, bilateral forms are rare. Its prevalence is around 0.4% of live births. There is no sexual predilection. The majority of affected infants are diagnosed before the age of 6 months. There is a high incidence of abnormal intrauterine positioning or difficult delivery in affected infants. Its etiology is unknown, but ischemia of the muscle related to obstetrical trauma has been suggested [2, 3, 4]. It is highly probable that fibromatosis colli represents a cellular reaction such as scarring of an injury to the sternocleidomastoid muscle acquired during the last trimester of intrauterine life, or at the time of delivery [1]. Congenital muscular torticollis is divided into 3 groups: tumor of the sternocleidomastoid muscle or fibromatosis colli (a torticollis with a palpable mass), muscular torticollis (a torticollis with muscular contracture without a palpable mass), postural torticollis (a torticollis without muscular contracture or a palpable mass) [5].

Clinically, the patient usually presents no abnormalities at birth, but between days 14 and 28, neck movement is limited, associated with cervical swelling. The sternocleidomastoid muscle appears shortened, resulting in torticollis, with rotation of the head to the side of the lesion [2, 3]. In our patient, we found no torticollis.

Ultrasound is a useful, accessible and non-invasive complementary examination for diagnosis and monitoring. It reveals a fusiform thickening in the lower two- thirds of the sternocleidomastoid muscle. The thickening may be homogeneous or heterogeneous. It may be hyperechoic or hypoechoic, depending on how long it has been present. In real time, movements of the mass are synchronous with those of the sternocleidomastoid muscle [6, 7]. In our patient, ultrasound revealed heterogeneous fusiform thickening of the right sternocleidomastoid muscle, with loss of its fibrillar appearance.

Cytopuncture is indicated in cases of diagnostic difficulty. It confirms the diagnosis and eliminates other congenital, inflammatory and tumoral causes. It reveals fibroblastic proliferation and degenerative, atrophied striated muscle fibres [8, 9].

Treatment of infants with torticollis is guided by the child's age, the severity of the torticollis and the presence of other associated neuromuscular or orthopedic conditions. Approximately 50-70% of SCM tumors regress spontaneously within the first year of life.

Treatment is generally conservative, based on stretching exercises. In rare cases of persistent symptoms, surgical treatment such as open tenotomy or removal of the mass may be necessary [2,3,4,7,10]. In our case, the mother was advised to turn the child's head towards the affected side.

In the majority of cases, spontaneous evolution leads to recovery by the age of 2
[7].

Conclusion

Fibromatosis colli is relatively rare, and its frequency in Africa remains to be established. Diagnosis is based on a combination of clinical findings, ultrasound and cytology to rule out other causes of torticollis in newborns and infants.

Treatment is essentially conservative, and the outcome is often favorable.

***Correspondence**

Ahmadou Cheikhou SALL

salll88@hotmail.com

Available online: November 30, 2023

1 : ENT Department, Diamniadio Children's Hospital, Dakar, Senegal

2 : Service d'imagerie médicale CHNU de Fann, Cheikh Anta Diop avenue, Dakar, Senegal
3 : Saint-Louis Regional Hospital ENT Department
4 : Clinique ORL Lamine-Sine-Diop CHNU de Fann, Cheikh Anta Diop avenue, Dakar, Senegal
5 : ENT and Cervicofacial Surgery Department, Amadou Sakhir NDIEGUENE Regional Hospital, Thiès, Senegal

© Journal of African Clinical Cases and Reviews 2023

Conflict of interest : None

References

[1] O'connell J. Fibromatosiscolli. In: Fletcher CD, Unni KK, Mertens F. eds. World Health Organization classification of tumors: pathology and genetics of tumors of soft tissue and bone. Lyon: IARC Press. 2002; pp 61-62
[2] Khalid S, Zaheer S, Wahab S et al. Fibromatosis colli: a case report. Oman Med J. 2012; 27(6): e011.
[3] Lengane NI, Tall M, Some Mjm et al. Le Fibromatosis colli : A propos de deux cas cliniques ; J. TUN ORL - n°42 décembre 2019
[4] Donna M, Demirkol M, Guzelant AY et al. A rare association: unilateral fibromatosis colli and contralateral clavicle fracture in a newborn. Int J Pediatr Otorhinolaryngol. 2015; Extra 10: 40-1.
[5] Tempark T, Chtproedprai S, Mahayosnond A et al. Fibromatosis colli, overlooked cause of neonatal torticollis: a case report. Int J pediatr Otorhinolaryngol. 2012; Extra 7 : 15-7.
[6] Crawford SC, Harnsberger HR, Johnson Let al. Colli fibromatosis de l'enfance : CT et résultats sonographic. AJR Am J Roentgenol. 1988; 151:1181-3
[7] Lin JN, Chou ML. Ultrasonographic study of the sternocleidomastoid muscle in the management of congenital muscular torticollis. J Pediatr Surg. 1997; (32):1648-51.
[8] Sharma S, Mishra K, Khanna G. Fibromatosis colli dans les enfants en bas âge- une étude cytologique de huit cas. Acta Cytol. 2003; 47:359-62
[9] Khan S, Jetley S, Jairapuri Z et al. Fibromatosis colli - a rare cytological diagnosis in infantile neck swellings. Journal of Clinical and Diagnostic Research. 2014 ; 8(11): 8-9.
[10] Nilesh K, Mukherji S. Congenital muscular torticollis. Ann Maxillofac Surg 2013;3:198–200

To cite this article :

AC Sall, I Niang, N Ndour, AD Faye, C Ndiaye, A Sy et al. Fibromatosis colli or congenital muscular torticollis: a case report. Jaccr Africa 2023; 7(4): 148-151