Case Reports

CONGENITAL TORTICOLLIS

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MJAFI 2000; 56 :55-56

KEY WORDS: Congenital torticollis

Introduction

Congenital torticollis is also named as sternomastoid tumour or fibromatosis colli. Congenital torticollis is a misnomer as it is not a true congenital abnormality. The term torticollis means twisted neck and is derived from the latin words 'tortus' and 'collum' [1]. It usually does not appear before the age of four years as it becomes more obvious with the growth in the length of neck. Torticollis is not a diagnosis but rather a sign of underlying disorder and should prompt an active search for the cause. It may be congenital or acquired. Congenital muscular torticollis being the most common form occurring in 0.3 to 0.5% of all live births and usually involves unilateral sternocleidomastoid muscle contraction [2]. The most likely causes include intrauterine malposition and birth trauma. Conservative treatment in the form of gentle manipulation of head may prevent torticollis. Surgery in the form of neck muscle release is indicated only if torticollis persists after the age of one year [3]. The best technique is to divide the muscle at its distal or proximal attachment. Subcutaneous tenotomy being blind method should be avoided in children. We present a case of congenital torticollis who presented to us at the age of 13 years and has been corrected after surgery.

Case Summary

13-year-old son of a retired soldier reported with inability to hold his neck straight and head deviated to right side for last three years. No history suggestive of birth trauma or swelling around neck on same side. On examination, averagely built and nourished, head twisted towards right and chin rotated to left (Fig. 1). No squint was seen. Local examination revealed sternomastoid like a firm cord on left side of neck. Lateral deviation and extension restricted on right side. X-ray cervical spine did not show evidence of hemivertebra. Patient was evaluated and planned for sternomastoid release under general anaesthesia. Sternomastoid muscle divided at its lower end, sternal and clavicular heads divided with cautery under finger guidance. Wound closed in layers with a pincer drain. Drain was removed after 6 hrs. Sutures removed after

seven days. Patient had uneventful post-operative period. At present he is using torticollis harness and is undergoing physiotherapy. He has shown definite improvement after surgery as shown in Fig-2.

Discussion

Craniofacial asymmetry is thought to result from congenital torticollis when there is neck rotation and head tilt. In classic muscular torticollis, the head is drawn to the side of neck muscle tightness and usually is rotated so that the chin points to the other side. The causes of an abnormal head posture include skin webs, congenital muscular torticollis, deformities of the cervical spine and craniocervical junction, ocular and neurological problems, birth trauma, cervical adenitis and atlanto-axial instability. [5] The common 'cock-robin' posture includes a face tilt and turn to opposite

Fig. 1 : Congenital torticollis before correction

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Fig. 2 : Congenital torticollis after correction

side and some chin depression as shown in photograph (Fig-1) [1].

Congenital muscular torticollis is relatively common in first two months of life and is thought to be due to birth related trauma. Contrary to this, in this case parents noticed head tilt at the age of three years but ignored, subsequently reported at the age of 13 years for surgery. It may be associated with CDH in upto 20% of cases [6,7]. Plagiocephaly is common and there may be palpable muscle tumour or tightness of the sternomastoid as was found in this patient [8]. When no definite diagnosis is possible, referral should be made for an ophthalmic examination to

rule out ocular findings [9]. Radiographic analysis of these patients with congenital muscular torticollis revealed characteristic ipsilateral fronto-orbital flattening and contralateral occipitoparietal flattening relative to the side of muscular torticollis. Treatment options being conservative initially with stretching exercises, performing surgery for neck muscle release only if torticollis persists after the age of one year [3]. The evaluation of torticollis requires a systematic team approach with members from fields of radiology, physiotherapy, craniofacial surgery, orthopaedics, neurosurgery and ophthalmology.

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