Congenital Muscular Torticollis: A Few Suggestions Regarding Treatment

Dear Editor,

This is with reference to the case report titled 'Congenital muscular torticollis' (MJAFI 2005; 61: 227-78.)

The authors need to be complimented on drawing the attention of readers to a relatively uncommon disorder. However, a few alternatives/additions regarding treatment protocol are suggested.

a) During infancy, only conservative treatment indicated is in form of stretching of sternomastoid by parental manipulation of child's head. Majority of the cases have excellent results [1]. Release/Excision of lesion during infancy is unjustified.

b) If the muscle is still contracted after the age of one year, it should be surgically released as brought by the authors.

c) In more severe cases which have been neglected for many years (10 years in the reported case), a bipolar release of stenomastoid at both proximal & distal ends is more appropriate and safer surgery. Bipolar release is likely to be more appropriate in such a neglected case rather than extensive dangerous surgical release procedures around extremely important and delicate structures like phrenic nerve and carotid sheath [2].

d) Post-operative rehabilitation involves intensive physical therapy including manual stretching of neck to maintain the overcorrected position. These exercises are sufficient to maintain correction and plaster casts/braces used in this case in addition to physical therapy are unnecessary and inconvenient to the patient [3].

References

1. Coventry MB, Harris L: Congenital muscular torticollis in infancy: some observations regarding treatment, J Bone Joint Surg 41-A: 815, 1959.
2. Wirth CJ, Hagena FW, Wuelker N, et al: Biterminal tenotomy for the treatment of congenital muscular torticollis: long term results, J Bone Joint Surg 74-A: 417, 1992.
3. James H Beaty: Congenital Anomalies of Trunk and Upper Extremity. In: Campbell's Operative Orthopaedics, Vol-1, 9th ed, Mosby, 1998, 1064-67.

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Reply

Dear Editor,

The authors wish to place on record their sincere gratitude for the interest shown in the article and greatly appreciate the observations made by the discerning reader. A detailed reply to the comments is as follows:

a) Congenital muscular toticollis during infancy is corrected by a regimen of stretching exercises and is associated with positive outcomes in more than 90% of cases [1]. There is no justification for a surgical approach in a child who is under one year of age [2]. Surgery is indicated when a patient has undergone at least six months of controlled manual stretching and has residual head tilt, deficits of passive rotation, lateral bending of the neck of >15 degress and a tight muscular band or tumour [3].

b) Unipolar release of the muscle distally, is appropriate in most cases. Bipolar release, proximally and distally, may be indicated for moderate and severe deformity and when over correction is not possible by distal tenotomy alone [4]. Since it was possible to obtain a satisfactory over correction of the deformity by unipolar distal tenotomy in this patient a proximal tenotomy was avoided, especially in view of the higher risk of injury to the Facial and the Spinal Accessory nerves associated with the latter procedure.

c) Post operative use of plaster cast (Minerva cast)and adjustable torticollis brace is important to maintain the head in the over corrected position, especially in children older than 2 years of age [5] and in those patients who are not highly motivated for physiotherapy [6]. The newer adjustable braces cause much less discomfort to the patient compared to plaster casts and are hence better tolerated.

References

1. Luther BL. Congenital muscular torticollis. Orthop Nurs 2002 May-June; 21(3): 21-7; quiz 27-9.
2. Morrison DL, MacEwen GD. Congenital muscular torticollis: observations regarding clinical findings, associated conditions, and results of treatment. J Pediatr Orthop 1982; 2(5): 500-5.
3. Cheng JC, Wong MW, Tang SP, Chen TM, Shum SL, Wong EM. Clinical determinants of the outcome of manual stretching in the treatment of congenital muscular torticollis in infants. A prospective study of eight hundred and twenty one cases. J Bone Joint Surg Am 2001 May; 83-A(5): 679-87.
4. Beaty James H. Congenital anomalies of trunk and upper extremity. In: S Terry Canale, editor. Campbell's Operative Orthopaedics, 9th edi. Mosby, 1998; 1061-75.
5. Cheng JC, Tang SP. Outcome of surgical treatment of congenital muscular torticollis. Clin Orthop 1999 May; (362): 190-200.
6. Wirth CJ, Hagena FW, Wuelker N, Siebert WE. Biterminal tenotomy for the treatment of congenital muscular torticollis. J Bone Joint Surg 1992 March; 74-A, 3, 427-34.

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