



SURGICAL MANAGEMENT OF CONGENITAL MUSCULAR TORTICOLLIS – A RETEROSPECTIVE STUDY IN OUR INSTITUTIONAL EXPERIENCE.

Dental Science

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ABSTRACT

Background Congenital muscular torticollis is a common musculoskeletal anomaly characterised by the shortening of the sternocleidomastoid muscle. This paper reports the authors experience of 5 patients treated with bipolar release of sternocleidomastoid muscle. **Method** Between 2021 and 2022 5 patients 3 female and 2 male with congenital muscular torticollis who underwent surgical procedure of bipolar release at the proximal and distal end of sternocleidomastoid muscle. **Result** Post surgery the range of neck movement, head tilt and appearance improved. No patient developed any permanent complication or required surgery for recurrence. **Conclusion** In case of congenital muscular torticollis surgical release of proximal and distal end of sternocleidomastoid muscle may be an ideal approach.

KEYWORDS

congenital muscular torticollis, sternocleidomastoid, bipolar release.

INTRODUCTION

Twisting of head and neck due to shortened sternocleidomastoid muscles is called torticollis. It causes tipping of head towards the shortened muscle while rotating the chin in opposite direction. Torticollis is seen at all ages from new born to adults. It can be congenital or post natally acquired early and accurate diagnosis, as well as proper management of such cases are important because untreated or improperly treated patients with congenital torticollis are more likely to develop secondary condition, such as plagiocephaly, scoliosis and balance problem.

MATERIAL AND METHOD

Between January 2019 to December 2022, 8 patients (5 male + 3 female) with congenital muscular torticollis underwent bipolar release of sternocleidomastoid muscles under general anaesthesia.

The patient ages ranged from 5 to 22 years and follow up period from 6 to 12 months (means 9 months) , post-surgery , patients were subjected to 3 months physiotherapy.

DISCUSSION

In the current study 8 patients of age group 5 to 22 with neglected CMT underwent bipolar release at the proximal and distal end of sternocleidomastoid muscle.. Post surgery, patients were subjected to 3 month physiotherapy. Patients were also evaluated at 6 months follow up. The range of neck movement, head tilt and appearance improved in treated patients.

According to Sonmez et al. 95% patients diagnosed and treated effectively before the age of one year did not need surgical treatment [9]. Surgery is recommended in patients with residual head tilt, or lateral bending of more than 15° at the age of 6 months [10]. Various studies have shown that late release of the sternocleidomastoid muscle for patients more than 6 years of age could yield acceptable results.[8,11,12]. There are a few reports of surgical treatment for adults (over 20 years old) [6, 7]. in a study conducted by Farzadet al Eighteen patients (18 to 32 (average 21.9) years) were studied who were surgically treated for neglected CMT. The patients were followed up for 2.5 yrs, and surgical results for most patients were excellent or good [6]. Twelve adult patients with neglected CMT (17 to 31 (average 24) years) were surgically treated and were followed up for a minimum of two years. Most patients showed excellent results in the range of neck movement and head tilt improved in all 12 patients and cosmesis improved in 11 [7]. In study by Song Ho et al , unipolar resection at the distal end of the SCM; rotation and lateral flexion on the left side improved, and SCM tension disappeared during surgery. Thus showing it to be a good treatment option.

In present study, Patients were also evaluated at 6 months follow up. The range of neck movement, head tilt and appearance improved in

treated patients. No patient developed any permanent complication or required surgery for recurrence. No serious postoperative complications such as infection or hematoma were observed. In conclusion, patients with CMT may benefit from surgical sectioning of the SCM in neglected CMT cases.



A
(a)Preoperative photograph showing severe head tilt. **B**
(b) Postoperative photograph taken after surgical release showing an excellent cosmetic result.

RESULTS

This report aims to provide the outcome of 8 patients of age group 5-22 years with neglected CMT who underwent bipolar release at proximal and distal end of sternocleidomastoid muscle.

The range of neck movement , head tilt and appearance improved in treated patient, no patient developed any permanent complication or required surgery for recurrence. No serious post operative complications such as infections or hematomas were observed. Thus surgical management may be a treatment option in cases of neglected congenital muscular torticollis.

CONCLUSION

In conclusion, patient with CMT may benefit from surgical sectioning of the SCM in neglected CMT cases.

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