RATIONAL APPROACH FOR THE MANAGEMENT OF STERNOMASTOID TUMOUR

Pages with reference to book, From 66 To 67

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Abstract

How a Sternomastoid Tumour should be treated The answer to the question is debatable. It was observed that some of the patients who were advised surgery for Sternomastoid Tumour, but refused surgery later had no residual deformity. A study was planned and carried out during 1979 to record the progress of the Sternomastoid Tumour. Management of the patient was postural rather than active surgery or physiotherapy. Out of 9 patients 1 (one) required surgery for tight left Sternomastoid and facial deformity. Two patients failed to follow up. In the rest the Tumour disappeared without leaving any disability or deformity (JPMA 31:66, 1981).

Treatment of" the Sternomastoid Tumour has been a bone of contention between the radical and conservative surgeons. Brown and McDoweny (1950) had done detailed histo-pathological studies of the muscle affected by the Tumour, and found extensive fibrosis of the muscle, besides the Tumour area. Therefore they recommended total excision of the Sterno-cledomastoid muscle, to prevent the development of torticolis and the facial asymetry. The conservatives believe that the Haematoma in the muscle resolves in clue course, and they therefore believe in active physiotherapy rather active surgery.

Material and Method

Many of the patients we observed, were reluctant to have the surgery performed. At the same time due to various reasons they were not regular to come for physiotherapy. Some of them when later seen did not have any torticolis or residual deformity of the skull. To assess the progress of the tumour and determine the guidelines for surgery, a system of examinations was devised. A proforma was prepared to record the findings. All the patients were examined by the author on the first and subsequent visits. In all 9 patients were seen during 1979 (Table I).

Table 1: Sternomastoid Tumour Rational Approach

Total Number of Patients	9
Males	6
Females	3
Age Group:	15 Days — 3 Months

The youngest patient was 15 days old and the eldest 3 months. Largest number were seen when they

were fifteen days old. History of the type of delivery was recorded (Table-II).

Table II: Sternomastoid Tumour Rational Approach

Type of Delivery:	
Breach	3
Forceps	2
Normal	1
Not known	1

In five there was a history of Breach delivery, in two forceps were applied and one was a normal delivery. Seven were first born and one each were second and third issues.

In seven the tumour was on right side, and in two on the left side. There was no patient with the bilateral tumour in this series. The measured distance between the tip of the Mastoid and the Sterno-Calvicular joint on the same side is the length of the Sternomastoid muscle (Fig. 1).

Fig. 1 : Showing management of the length of sternocledomastoid muscle.

Measurements were made on both the sides with the face turned to the opposite side (profile view) at the weekly interval with rubber covered devider. This distance was later measured on a scale in centimeters. The size of tumour was also measured in vertical and transverse directions and noted, to determine the resolution of the tumour. The smallest size of the tumour was 1 cm x 1 .5 cm and the largest 3 cm x 2.5 cm. In five patients the tumour was in the middle one third of the muscle. In one each the tumour occupied the middle and the lower third. In three the lower third. The deformities of the skull (Frontal and Occipital bossing was also recorded, along-with other anamolies). One patient had Erbs Palsy on the side of the tumour. One patient had Haeman-gioma of the scalp.

Management

All patients were called back for weekly check. No physiotherapy was advised. However the parents were advised to put the baby to sleep on the side of the Tumour. A pillow was placed under the head keeping the shoulder free (Fig. 2).

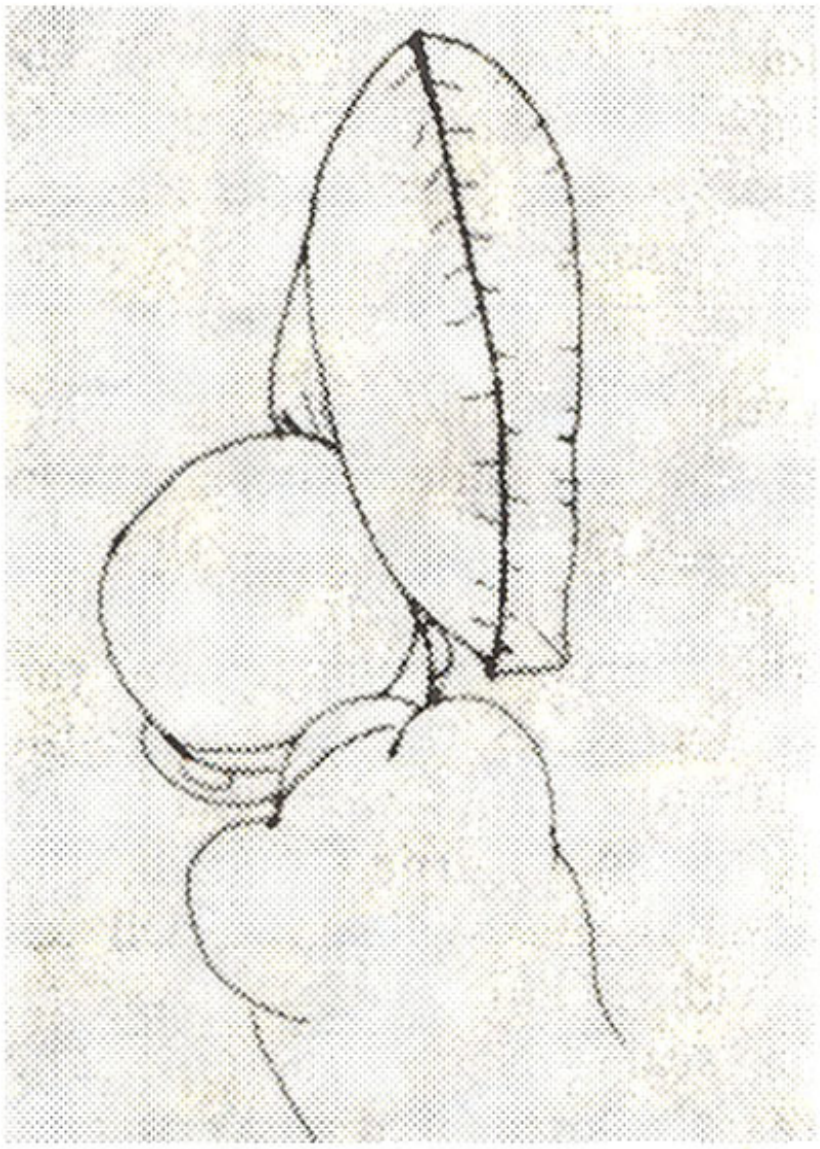

Fig. 2 : Showing position of the head and shoulder of the patient. Patient sleeps on the side of Tumour.

The height of the pillow was adjusted so as to make the skull bend to the opposite side a little away from midline.

Results

Three patients failed to come back for the follow up. In them the tumour size was small. It is possible that as the main concern of the parents was the tumour, the disappearance of tumour might be the

reason for failure to return. In five patients the tumour disappeared between four weeks to four months, with correction of shortening. The oldest patient of the series, who was three months old, did not show any improvement in the shortening despite the disappearance of the tumour in three weeks. A tenotomy of the lower insertion of the Sternomastoid and facio-tomy was performed at this time. There was full correction of the shortening, and recovery of the full movements of neck. The frontal bossing and depression of cheek also disappeared after four weeks.

Conclusion

Nine patients who developed swelling in the Sternomastoid muscle were diagnosed having sternomastoid tumour, on clinical examination. Majority were the product of first pregnancy and had a history of difficult labour. Due to the small number in the series no case of bilateral tumour has been recorded.

As our patients are neither keen for surgery nor they carry out regular physiotherapy a simple procedure to overcorrect the shortening by using a thick pillow during sleep under the head was used. This provided maximum period of stretching for the shortened muscles. In the majority of the patients this method was successful and there was neither shortening nor limitation of the movements at the end of the treatment. One patient who came for the treatment rather late did not show any improvement in the shortening and had to have tenotomy, with good results. This approach presents a compromise between the radical surgery and active physiotherapy.

Reference

1. Brown, J.B. and McDoweny, F. (1980) Wryneck facial distortions prevented by resection of fibrosed sterno cicido-mastoid muscle in infancy and childhood. Ann. Surg., 131:721.