THE TREATMENT

OF

TORTICOLLIS,

(WRY-NECK.)

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THE TREATMENT OF WRY-NECK OR TORTICOLLIS.

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WRY-NECK or Torticollis, when diagnosed, should be at once placed under treatment, because if not treated the condition progresses slowly but surely, the clavicle becoming bent upward, the spinal column becoming curved in a lateral rotary direction, and the vision becoming imperfect, owing to the eyes being placed upon a different level. The treatment may be divided into 1, preparatory; 2, operative, and 3, the after treatment.

1. *Preparatory Treatment* consists in the daily use of the spinal extension frames devised by the writer (see Figs. 1 and 2), which allow traction of the contracted muscles to be continued for a long time with

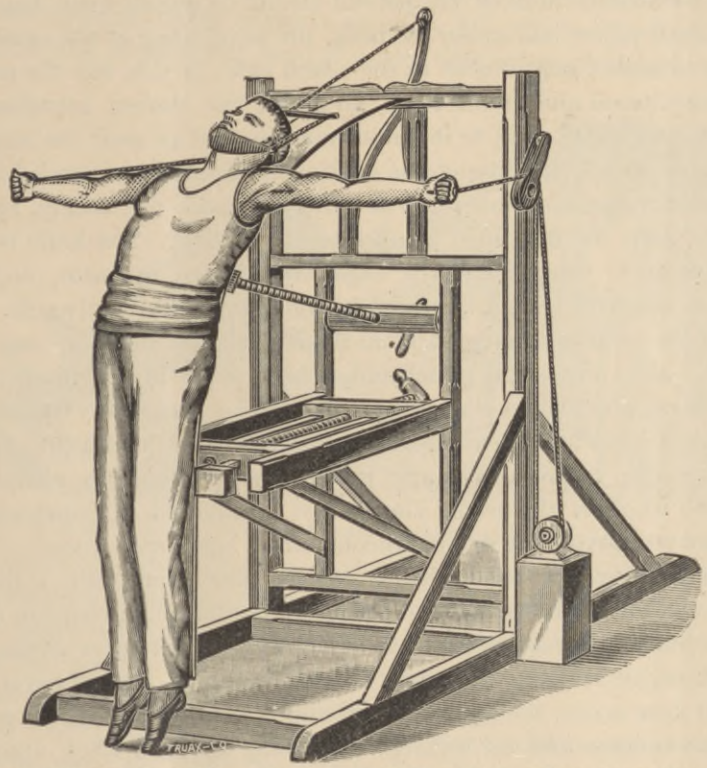

Fig. 1.—Stillman's Vertical Frame for Producing Backward Curved Extension of the Spine during Exercise.

very little fatigue to the patient, and if the case is a severe one, the conjoint use of a brace, similar to that shown in Fig. 3. In mild cases, this treatment will be sufficient to cure the condition. In most cases, however, it is necessary to resort to operative procedures in conjunction with the use of the apparatus just detailed.

2. *Operative Treatment.* Before entering, however, into a detailed description of these procedures, it will be well to caution the reader not

to resort to them too hurriedly, because perseverance in mechanical means very often leads to excellent results, and also because the operations themselves are not unattended with danger, owing to the proximity of the carotid artery and jugular veins; and numerous cases are recorded in which very troublesome and dangerous hemorrhages have occurred, several of them terminating in the death of the patient.

As most of the cases of wry-neck demanding operative interference depend solely on contracture of the sterno-cleido-mastoid muscle, the operation that is most often performed, and which is usually sufficient, consists in the sub-cutaneous section of one or both origins of this muscle on the affected side. We will, therefore, first describe the method of doing this, and subsequently merely mention the procedures necessary in the rarer cases. In performing the operation of section of the sterno-mastoid muscle, the patient should be placed upon the back and a small pillow laid under the neck, the head being at the same time forcibly extended and rotated to the sound side; in this way the muscle is rendered tense and prominent. To divide the sternal attachments, a puncture is made close to its inner margin, and as near the sternum as possible, and a small tenotome cautiously inserted and carried *behind* the tendon, care being taken not to carry the knife too deeply, and always to keep its flat edge *parallel* to the tendon. The knife is then turned so as to bring its sharp edge towards the operator, and the muscle is cut with a slightly sawing motion from within outwards. Instead of the ordinary sharp instrument, a probe-pointed tenotome may be used. After the initial puncture has been made in the integument, and in those cases where the muscle cannot be made very tense, it is wise to first insert a grooved director behind the muscle and then to cut on this. The incision, although made freely enough to completely divide the whole of the origin, should not be allowed to penetrate the skin, and so convert the sub-cutaneous into a large open wound. Such an accident may be best avoided by cutting slowly and with a slightly sawing motion, at the same time easing up the forcible extension of the head as the last fibres are about to be divided, so as to prevent the sudden jerk which is liable to occur at that moment. If, however, this accident does occur, the lips of the wound are to be brought together by catgut sutures and an antiseptic dressing applied, when union by first intention may be expected. As in all sub-cutaneous operations, the finger should follow the blade of the knife as it is being withdrawn, and then lightly pressed over the external wound, so as to prevent the entrance of air. Lastly, the external wound is to be dressed with some simple dressing, as a pledget of lint or carbolized gauze, etc.

To divide the clavicular attachment of the muscle, the same general directions are to be followed as above. The initial puncture may be made either at its inner or its outer margin, some surgeons preferring one,

some the other site; the inner is the one most often chosen, but in those cases in which the external jugular lies quite close to or overlaps the muscle, it is safer to begin the operation from the outer side. After the muscle has been divided, the operator may pursue one of two methods: either he may leave the head in its abnormal position until the external wound has healed and all signs of inflammation have disappeared, and then gradually rectify the deformity by daily manipulation and mechanical apparatus; or else he may at once correct the deformity and maintain the head in a nearly normal position from the start. Up to within a few years, the former was the practice almost universally adopted, and it is still very generally pursued; at present, however, the latter method is gaining favor, and Sayre especially advocates it in strong language. His reasons for so doing, as stated by himself, are as follows: (1) "The exuded material, being larger in amount, will, when organized, make a stronger and more useful bond of union than when stretched out into a

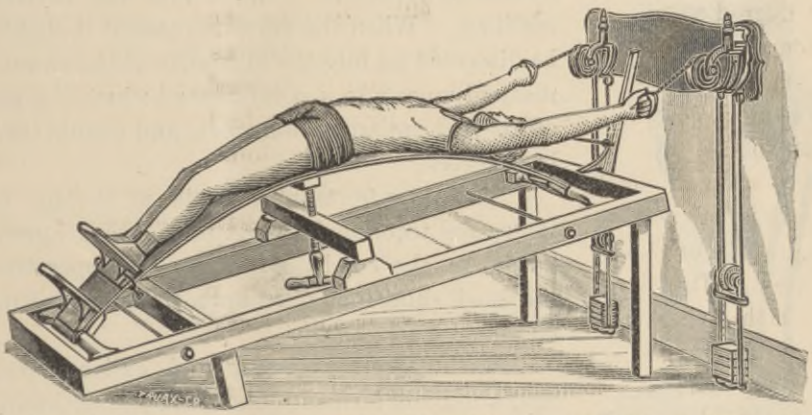

Fig. 2.—Stillman's Horizontal Frame for Backward Curved Extension of the Spine During Exercise.

fine cord, as in the former method of previous writers." (2) It does away with the daily stretchings (rendered necessary by the old method), which demand the daily attendance of the surgeon, and which are often so painful as to necessitate their discontinuance. (3) In his hands it has never been followed by suppuration.

In some cases, after division of the sterno-cleido-mastoid muscle, it will be found to be still impossible to rectify the position of the head. In these cases the difficulty will be found to depend on contracture of other muscles, the trapezius and scaleni; or else on bands of connective tissue running up under the divided muscle. If it be the trapezius that is at fault, it may easily be divided sub-cutaneously either *in toto* near its occipital attachment, or partially near its clavicular attachment. If, however, it be the scaleni muscles that are contracted, the operation for their division assumes dangerous proportions, and is attended with great difficulty, on account of their lying deeply and being surrounded

by very important structures. Their division has, however, been effected by Bauer, but the dangers attendant on such an operation will probably deter most prudent surgeons from its performance. If the reduction of the deformity be prevented by bands of connective tissue, Erichsen advises that they should not be divided, as they will generally yield in time to mechanical extension, and also because their division involves great liability of injuring the large vessels and nerves of the neck.

There is yet to be considered the treatment of spasmodic wry-neck. In this form of the affection, tenotomy of the sterno-mastoid muscle has been followed by only temporary relief. Stretching of the spinal accessory nerve has been followed by permanent relief in several instances, but the best results have been obtained from excision of portions of this nerve. To reach it an incision should be made behind and parallel to the posterior margin of the sterno-mastoid muscle, and having its centre on a level with the thyroid cartilage. When the nerve is reached it should be dissected up into the substance of the sterno-mastoid muscle to a point beyond where it gives off its first muscular branches, and should then be exsected.

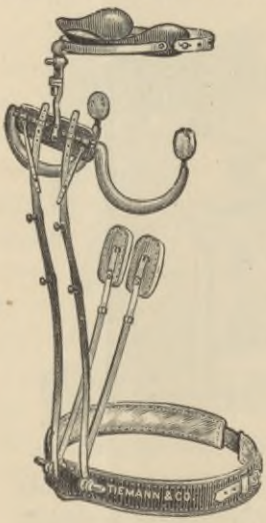

Fig. 3.

The *after-treatment* consists in the use of the spinal traction frames, and a brace appropriate to the condition. After the operation the head should be fixed upon the plan recommended by Dr. Little.

With adhesive plaster and calico bandage, a band is formed round the head, encircling the forehead and occiput, and one round the waist. A ribbon is to be sewn to the head bandage just above the ear of the unaffected side, and carried down diagonally in the direction of the normal sterno-mastoid muscle to the waist bandage and there fixed. This plan produces flexion of the head, a position which can be prevented by the use of an additional band reaching vertically from the back of the head to the waistband. After four or five days' rest, manipulative extension may be commenced and continued daily for several weeks, and the treatment will take from a month to three months or longer, and will consist of nearly the same procedures that are recommended under the head of preparatory treatment, but with the addition of massage and appropriate electrical treatment for the muscles, which are often very weak, and if not treated, apt to cause relapse.

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