

The treatment mainly consists in the satisfactory answer of two questions, viz.: (1) How best to empty and keep the tympanic cavity clear of the secretion, and (2) How best to modify or suspend the suppurative process—which depends upon a pyogenic organism.

For cleansing purposes most surgeons use warm water syringing and the Politzer bag, or better still Valsalva's process of inflating the middle ear. The last proceeding dries out and effectually empties the cavity of morbid products, and should be repeated as often as necessary. Careful removal of the secretion by absorbent cotton on the end of a probe—dry cleansing—is quite efficient, but had better be done by the surgeon than entrusted to an attendant.

(2) The local treatment being principally directed to the destruction of the disease germs common to suppurative action, the reason can be readily understood for the great number of rival agents employed here as elsewhere in antiseptic surgery, viz.:—Corrosive Sublimate, Lactic, Boric, Salicylic and Carbolic Acid, Iodoform, Peroxide of Hydrogen. The last remedy seems to answer all the indications, being powerfully antiseptic and unirritating. It may be used by instillation after cleansing in 10-12% sol., twice daily. As far as my experience goes this remedy has been satisfactory, and I think worthy of a more extended trial, when it is hoped it will maintain the good reputation it has already attained.

The aim of aseptic surgery in this disease, as advocated by prominent aural surgeons, is to keep out the disease germs, which is correct in theory; but as the tympanum, as long as the Eustachian tube is patulous, is never closed to infectious germs, *packing* the external auditory canal with boric acid as strongly advocated by high authority, while it will not serve to exclude the disease germs, often has the effect of damming up the secretion, which is productive of great pain and danger.

Mr. President and Gentlemen,—I thank you for your patient attention to this hastily gotten up paper, and the most I can hope for is that some point referred to may awaken an interest among *every member* of the profession in one of the most common but I fear most neglected disease existing among us.

#### ADVANCEMENT OF THE INTERNAL RECTUS MUSCLE FOR DIVERGENCE, CAUSED BY OVER-CORRECTION FOR CONVERGENCE.

BY STEPHEN DODGE, M. D.

**M**ISS ——— consulted me July, 1882, adult, V. R. 20/20 nearly L. 2/200. Had strabismus convergens of the left eye since infancy, until five years ago, when the Internal Rectus of both eyes were cut. She now has marked divergence of the left eye with weakness of the internal rectus of the same eye. Some time after the operation she was occasionally troubled with diplopia, and for the last three years has seen double nearly all the time, especially if the eyes were tired. The left eye has been more or less painful ever since the diplopia was so marked, and it has even increased for the last year. After the pain has been present in the left eye for some time, the right also becomes painful.

After atropine was dropped in the right eye, vision was improved by a + 60 cyl. glass, axis perpendicular, left also sees better with the same glass similarly

placed; but vision is so imperfect that the change is not so marked as in the right. Subcutaneous injections were employed daily, gr. 1/15 of strychnia for about twelve days. A reading glass, + 5s., was also used with which she practised daily for three or four hours altogether in trying to read. At first she was not able to make out more than No. 20 J., and very slowly. At the end of two weeks she could read No. 14 J. quite readily if the word was short; and she could even make out the letters of No. 12 J. slowly, and words of that size of type unless they were long, when she complained of being unable to see the centre of the word. For several days she had a tolerably strong Faradic current applied to the left eye. I could not attribute any improvement to the latter agent, but under the use of strychnia there was a decided improvement for a time. It was observed in about 15 or 20 minutes after the hypodermic use of this drug; as is generally the case when benefit arises from its suitable employment. But she was conscious that the use of the eye in reading, after the manner referred to, gave the best results. The field of vision improved in every direction. It was always better to the L. in the left eye than toward the R. But the field improved towards the nose equally with the opposite direction. Objects at first looked cloudy, but they became clear and more distinct.

The object of this attempt to improve the sight by exercise was to discover whether the nervous elements of the retina retained sufficient vitality to warrant the expectation that the activity of vision would be improved by an operation,—whether the dynamic relations of the internal and external recti muscles would become so changed as to lead to parallelism of the two eyes, and the operation become a permanent success. To begin with, the sight was very imperfect, yet the persistence of diplopia was a hopeful feature. Still, I was desirous of ascertaining, if possible, beforehand, the capability of the left eye for improvement in respect to its sight; and I was well satisfied with the tentative measures employed.

With the right eye closed the left fixes by turning inwards on looking at a light placed 16' away. At first the left eye is apt to tremble before seeing the light and fixing upon it. With the room darkened and the right covered, it is some time before the light used for fixing is seen by the left eye. With both eyes uncovered she sees double images crossed 7' apart at 16' away. She does not always see the double images readily under these conditions. She cannot bring the double images together with any combinations of prisms base inwards, and when more than one prism of 10° is added she has difficulty in seeing the double images at all. With a prism of 3°, base upwards, is placed over the left, and a red glass over the right, a prism of 10°, base inwards, over the left causes the double images to come together only about 6". The excursion of both eyes is about normal.

The improvement in vision in the left eye was sufficient to enable her to see 20/200 S.