LXIII.

THE MASTOID OPERATION DEPENDENT UPON PATHOLOGY.*

By Cullen F. Welty, M. D.,

San Francisco.

For some thirty years or more the duration of a discharging ear put it in one group or another in regard to operative procedure.

In this paper I wish to deal with children under fifteen years of age with discharging ears that have lasted one year or more. This one year period was established long ago by surgeons more eminent than myself.

I wish to show by a series of operated cases that a radical mastoid should not be done as a routine procedure, as many of the cases will recover by the simple operation. In other words, the pathologic findings before and during operation should determine the kind of operation to be done.

The contraindications to the acute mastoid operation in chronic suppurative otitis media in children under fifteen years of age may be divided into two groups—those that may be present prior to operation, and those that are found during the operative procedure.

All cases of proven tuberculosis of the ear should be excluded.

Group 1.—(a) Acute exacerbation of the chronic suppuration associated with cerebral symptoms.

(b) Vertigo, nausea, vomiting, nystagmus or facial paralysis.

(c) Acute or chronic labyrinthitis, or destruction of the labyrinth, fistulæ of the labyrinth, cases that react to the fistulæ symptom, also partial or complete destruction of the tympanic wall, true cholesteatoma.

---

*Read before the Pacific Coast Oto-Ophthalmological Society, June 15, 16 and 17, 1915, San Francisco, California.

Group 2.—(a) Cholesteatoma.

(b) Fistulæ of the semicircular canals.

(c) Such extensive bone disease of the walls of the attic and antrum that it cannot be removed with certainty.

This paper is based upon twelve cases in which the double mastoid operation was performed. Two of the cases were acute exacerbations of the chronic suppuration. All but one recovered from the discharge.

This particular case was well for some months, returning with a fistula through the bony attic wall. This was not seen prior to operation because it was one of the cases of acute exacerbation with the meatus almost closed.

I do not understand why it was not seen in the after-treatment. My only explanation is that it was mistaken for the perforation of the drum membrane and was finally healed completely.

As I said before, this case returned with a discharge and granulations coming from this perforation, low down on the tympanic wall. There must have been a slow carious process going on within the tympanic cavity. However, this never gave any distress. Reoperation will be required.

Schwartze's operation was originally performed for both acute and chronic cases. Some of the chronic cases did not recover, and at this time Stacke described an operation that was to cure the chronic cases particularly. This held for some time, or, rather, divided the honors with the Schwartze operation.

Neither of them was satisfactory until Zaufal combined the two operations, calling it the radical mastoid operation—used only in chronic suppurative otitis media, while the Schwartze method became the accepted procedure for the acute process.

The Stacke operation is done at the present time only when the sinus is so far forward that no other operation is possible.

In 1904 Jansen was doing an operation in chronic suppurative cases that never became popular enough to have a name. In this procedure he took most of the posterior wall down, but did not disturb the annulus tympanicus. He also took away as much of the attic wall as was possible in a given case, leaving the ossicles in place, so that they could be seen during or at the completion of the operation. He did not disturb the posterior membranous meatus. The case from this on was

treated as we treat our acute mastoid operations of today. This procedure was not entirely satisfactory and it was abandoned.

Some time after this, Heath of London introduced a universal operation for acute and chronic cases. This consisted in cutting down the posterior wall to the annulus tympanicus, destroying all the mastoid cells, cutting the posterior membranous canal and pushing it into this newly made cavity. The outer wound was closed; further treatment was through this posterior hole in the meatal wall.

This procedure is not entirely satisfactory in the hands of all men. In fact, no one operative procedure will be good in all cases.

With the array of facts as I have presented them, you can see why I have gone to the Schwartze operation in only selected cases.

I maintain that by going down to hard bone over your entire cavity, in cases such as I have selected, the hearing will be as good, or more than likely better than it was before the operation, Also, the after-care of the ear will be eliminated, and that will be a great factor.

Furthermore, if the case does not entirely recover, the radical mastoid may be performed.