

## LABYRINTHITIS IN SECONDARY STAGE OF SYPHILIS.\*

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It has been stated that about 10 per cent of all aural cases show evidences of pathological changes in some part of the sound perceiving apparatus. These changes, as would naturally be suspected from the histological structure of the internal ear, may be very varied in their nature. We may have an anemia, hyperaemia, hemorrhage, acute inflammation, atrophy and degeneration. The classification of the inflammatory changes, as made by Gruber, is simple and scientific.

According to this, we have 1st, labyrinthitis hyperplastica and 2nd, labyrinthitis exudativa.

In the first, we may have hypertrophy of auditory nerve-stem, thickening of periosteum; increase of perilymph and endolymph, hyperplasia of the connective tissue between membranous and osseous labyrinth, also of the membranous labyrinth, development of osseous tissue and chronic endarteritis. In exudative form, there is an intense hyperaemia, with serous or hemorrhagic exudation, or possibly purulent inflammation.

The most frequent causes of the hyperplastic form of inflammation is syphilis. It is usually a late manifestation in the acquired, and occurs around puberty in the hereditary form of trouble. The most prominent symptoms are deafness, coming on either gradually or suddenly, and loud aural tinnitus. Disturbances of equilibrium are slight, unless associated with the exudative form of inflammation. Both ears are usually affected. I wish to report the following case, which is rare and quite typical of pure labyrinthine disease.

Mr. T. S., age 31, consulted me on Nov. 14th, 1905, because of hardness of hearing. Patient stated that he had first observed the difficulty several weeks before, but paid no attention to it, thinking it would pass away. The trouble steadily increased; however, and for two or more weeks previous to consulting me, conversation was carried on with great effort. This was very apparent, as he could understand only when talked to in a loud voice close to the ear. Examination of tympanic membranes negative, both being perfectly normal in appearance. Loud-ticking watch

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could not be heard on pressure against nor back of ear. Examination of nose and throat and Eustachian tube revealed nothing of significance. Rinne test, decidedly +, bone conduction being very impaired. Tuning fork showed apparently but little restriction for low tones, although not marked for high tones, if intensity of same was increased. Tinnitus was very pronounced, but no dizziness, vertigo, nor nausea was present.

Here was evidently a case of acute labyrinthitis. The prognosis depending so much upon the etiology, an accurate diagnosis was important. From the nature of the case, I immediately suspected syphilis as a possible causative agent. The patient was very positive that he had never had such trouble. Has no throat trouble nor skin eruptions. No mucous patches were apparent. Questioning fortunately elicited one symptom which strongly confirmed my suspicions, and that was a very noticeable falling of hair and eyebrows for the preceding few weeks. As further examination revealed no organic trouble of any kind, I told him what was probably the cause of the trouble, and that with his earnest cooperation on that hypothesis, he might be greatly benefited. He was put on mercury both internally and by inunction until slight salivation was produced in about two weeks, and this same treatment continued in slightly modified doses for several weeks. Improvement was noticed by third day and continued unabated, being pronounced in 2 or 3 weeks. By January 18th, 1906, two months after beginning treatment, he could hear a whisper at two or three feet distance. The watch could only be heard about 2 inches away, however, and the bone conduction was still considerably impaired. When last seen about six weeks ago, the watch test showed still further improvement, being about 4 inches. No difficulty whatever, in conversation. Here was evidently a pronounced case of specific labyrinthitis in secondary stage of the general infection. This, I believe is rather rare, as the involvement usually occurs in tertiary stages, then in conjunction with otitis media catarrhalis. The gratifying results of treatment show the immense value of mercury here as elsewhere in early syphilitic affections. He was given no pilocarpine nor any other drug which might have prevented accurate deduction as to benefits of the mercury.