

## HISTORY OF A CASE OF CHOLESTEATOMA OF THE EAR.

BY EMIL GRUENING, M. D.,

NEW YORK.

The patient of whom I wish to speak was under my observation thirty years. She was a woman who had come to me when she was 24 years of age. In her infancy and youth she had often been troubled with a discharge from the right ear. At the time of the first examination, thirty years ago, the drum head did not exist; there was neither a malleus nor an incus; the tympanic cavity was dry and epidermized, the aditus ad antrum communicated with the middle ear as freely as if a radical operation had been performed. No actual operation had, however, been done. The process of disease had formed a spacious cavity from which now and then cholesteatomatous material descended into the external auditory canal. The ear was absolutely deaf. The patient would at times, especially after immersion of the head in a warm bath, complain of dizziness. I ascribed this symptom to the swelling of the cholesteatoma from imbibition of water, and treated the ear, when these symptoms appeared, by the instillation of glycerin and alcohol. After a few days of such treatment the cholesteatomatous material became dry, appeared in the canal, and the head symptoms would then disappear. When the attention of the patient was drawn to the circumstance that the waterlogged condition of the cholesteatoma might cause the head symptoms, and she refrained from filling the ear with water, the symptoms mentioned appeared but rarely.

During this long period of observation she was also seen, during her trips to Europe, by Politzer of Vienna, Bezold of Munich, and other noted aurists. None of these men proposed an operation, and all agreed that under the given conditions the treatment which she followed under my direction was sufficient.

In the month of March of this year she began to suffer from copious uterine hemorrhages. A gynecologist, who was consulted, found that she suffered from uterine fibroids, and advised that the uterus be removed, but also stated that an immediate operation was not imperative.

On March 23d of this year she was suddenly taken with a severe chill, high temperature (104.6), and frequent vomiting. The family physician, who knew that she had been under my observation for her aural disease, considered the possibility of a systemic infection by way of the lateral sinus, and desired to meet me in consultation. I saw her in the evening of that day. While I was in her house she had a severe chill and vomited. The temperature had risen to 105°. The examination of the ear showed what I had seen before, viz., a perfectly dry middle ear, no tenderness of the mastoid and postmastoid regions, no enlarged glands, and no sensitiveness along the course of the jugular vein. The ophthalmoscopic examination was negative, and I came to the conclusion that the sepsis from which the patient suffered was not caused by the condition of the ear.

In order to observe the patient more fully, and to have the necessary laboratory tests made, she was transferred to a general hospital that very evening. The leucocyte count was 24,400, with 88 per cent polynuclears. Enough blood was taken from the veins of the arm to make a blood culture. The gynecologist who had seen her previously, reexamined her at the hospital that evening, and came to the conclusion that the sepsis was not due to the uterus. He found, however, some tenderness of one ovary, and ordered the application of an ice bag. During the night the patient vomited frequently, her temperature remained high, and she had several severe chills. The mind remained clear.

On the following morning, March 24th, I met Dr. Whiting in consultation, who corroborated my views of the case. One of the gynecologists of the hospital, who was called in consultation disagreed with the previous finding in regard to the uterus, and proposed an immediate panhysterectomy. The husband of the patient consented. I was present at the operation. On cutting through the right ovarian vein a small amount of pus escaped. The removed uterus contained several submucous and intramural fibroids. The center of some of these fibroids were softened and discolored. The patient

rallied from this operation, but the temperature rose to 105.6° and the chills and vomiting continued.

On the morning of the 25th of March we received the laboratory report of the blood, which had been made under Dr. Libman's supervision. The streptococcus was found. A medical consultant, who was called by the family, advised an exploration of the right lateral sinus with ligation of the jugular. The patient had 40 respirations per minute, pulse of 140, and in view of the fact that the hemoglobin was 60 per cent, he thought she would bear the operation well. In order to gain time a surgeon ligated the jugular while I laid bare the sinus. Though the operation lasted only a few minutes the patient collapsed, but rallied after an intravenous infusion of hot saline solution. No thrombus was found in the sinus. The patient died that same evening. Dr. Libman made a local postmortem examination of the region of the lateral sinus, but found no clot. The pathologist of the hospital examined the uterus microscopically and found purulent thrombi in the uterine veins.

This case demonstrates that though a chronic disease of the middle ear may be associated with a systemic infection and a positive blood culture, we are not entitled, in the absence of local symptoms, to assume that the diseased ear must necessarily be the causative factor. We should exclude all other possible foci of infection. The result of the postmortem inspection of the sinus and the microscopic examination of the uterus showed that the operative procedure on the sinus was unnecessary.