

quadrant. The swelling of the soft tissues went almost completely away under ice bag, but the mastoid was prominent but not tender to deep pressure or percussion. On January 22nd the soft tissue began to swell again and I operated next day, and found the outer wall somewhat thinned and bulging, the whole mastoid carious, and the lateral sinus bathed in pus, and an opening through the posterior inferior part of process into neck. Cleaned it all out with chisel and curette and plugged it and the ear with iodoform gauze. No discharge from the ear after operation and hearing perfect.

*Examination of discharge from ear and nose* as reported by the house surgeon in charge. Some half-dozen examinations were made with uniform results:

1. *Before operation.*—Smears showed readily by ordinary stains pus cells were abundant and within the cells, and in many cases closely clustered about the nucleus were a number of pairs of diplococci. Morphologically and in point of size these were identical with the diplococcus of gonorrhea. Further, the microorganism was decolorized in Gram's method of staining. Cultures were then made on nutrient agar-agar and on Löffler's blood serum, but no growth could be obtained. Löffler's blood serum was then smeared with blood carefully drawn with all antiseptic precautions from the ear of another well patient, and inoculations made from the discharge from ear. Incubation at 37.5° C. for 36 hours showed a growth which on staining proved to be a non-capsulated diplococcus.

[I obtained some gonorrheal pus, and compared the gonococcus there found with the form present in pus from this patient, and morphologically, in size, in situation *within* the cell and in staining peculiarities they were identical].

The discharge from the nasal cavity showed the same form. The only other diplococci I knew of are the pneumococci and the diplococcus intracellularis found in epidemic cerebro-spinal meningitis, and both these forms, unlike the gonococci, are encapsuled. There were no other forms of bacilli found in the discharge.

2. Examination of the pus taken from the mastoid during operation showed the same form.

3. Examination of nasal discharge and material from mastoid cavity to-day, March 4th, did not show gonococci. The wound is nearly healed, and the patient has a better color, feels well, and has gained in weight probably 10 or 15 pounds.