

case there is an acute exacerbation of such a chronic process, such inflammation of these chambers may convert, what was formerly a simple matter, into one of most serious import. The drainage from the attic may be effectually prevented, and the inflammation extend to the brain cavity, meningitis or cerebral abscess resulting.

Who, that knows of the extremely thin plate of bone between this pathological condition and the dura mater, often imperfectly closed, especially in young persons, and the intimate vascular communication between the two cavities, can feel other than extreme anxiety as to the possibilities of alarming symptoms setting in at any unexpected moment? Here, as elsewhere in surgery, and, if possible, more emphatically, because of its dangerous proximity to a vital organ, it is our duty to effect full drainage of pent-up secretions and hunt out the offending cause.

To do this we must disarticulate and remove the two larger ossicles—malleus and incus—together with all remaining portions of an already useless and obstructive membrana tympani. This done, we have free drainage and free access to these upper chambers, which may be brought more successfully under treatment.

By this operation, we comfort ourselves that we have stepped out of and beyond the routinism of caustics and astringents, that have hitherto brought disappointment and odium to this special branch of surgery, and, after some experience in it, I felicitate myself in having been to many of my patients a, not unappreciated, benefactor.

In addition to the repression of otorrhea, I have witnessed a very marked improvement in hearing power. I shall not dwell upon the technique of the operation, nor upon the advisability of performing it with a view to greater possibilities, namely in that wider field of chronic non-suppurative catarrh of the middle ear, with pronounced deafness, for the purpose of improving hearing. I need only say the operation is a difficult one, and requires skill, manipulative dexterity, and thorough knowledge of the anatomy of the middle ear and all its relations.

In most cases this operation will correct the discharge and markedly improve the hearing. When it fails, we may infer the antrum contains the purulent focus, unless carious bone is already detected.

Under such circumstances the question of opening the mastoid must be discussed, which I may bring before you, together with some practical points in the operation, on a subsequent occasion.

## EXCISION OF THE KNEE—A MODIFIED SPLINT.

BY FRED. WINNETT, M.D., M.R.C.S., ENG.,

Surgeon to Home for Incurables.

The patient, Jane L.—, aged thirty-nine years, was admitted to the Home for Incurables, Feb. 22nd, 1891, suffering from what was supposed to be locomotor ataxy with Charcot's disease of left knee.

At the age of twenty-four years she fell and injured her spine, suffering more or less for a year. Christmas, 1890, the trouble returned in the spine and the left knee became diseased. She entered the hospital several times, but the above diagnosis was given and nothing was done.

May, 1892, I found the following conditions present: Patient was very emaciated, temperature normal. There was a marked projection of the middle dorsal vertebræ, and a slight lateral curvature of the lumbar spines to the right. The knee jerk was exaggerated and ankle clonus was present on the right side. Sensation was normal and motion almost lost in the legs. Bladder empties itself automatically at intervals, giving slight warning, but the desire can be restrained only for a moment. Pupils react normally to light and accommodation. Urine normal. Left knee flexed at right angles, dislocated back and capable of slight movement. Patella rests on the femur and grates on movement, while on either side is a fluctuating swelling. Aspiration of joint yielded one and a half ozs. purulent fluid.

Diagnosis.—Pott's disease of spine with transverse myelitis; strumous arthritis of knee.

A consultation was called and amputation advised, but as the patient declined, excision was done, June 30th, 1892. Dr. Atherton assisted. The joint was opened by the horseshoe incision and found completely disorganized and filled with pus. One and a half inches of tibia and one and three-quarters inches of femur were removed, patella dissected out, and a softened spot in the cancellous tissue of the tibia was scraped with Volkman's spoon. The flap was found redundant and one