case to the hands of the surgeon. One reason why such cases were occasionally permitted to run on too long was that, unlike acute peritonitis from some abdominal condition, these cerebral complications of middle-ear suppuration were comparatively uncommon. None the less we should always be prepared for them.

This was the last meeting of the Association prior to its amalgamation with the new Royal Society of Medicine, and Dr. Dundas Grant read a paper giving an account of the history of the Society since its inception.

Abstracts.

FAUCES.

Hamm, A., and Torhorst, H. (Strassburg).—Contributions to the Pathology of Keratosis pharyngis, with especial reference to the Bacteriology of the Disease. "Archiv für Laryngol.," vol. xix, Part III.

The writers of this paper consider that the evidence brought forward by Liebenmann, and supported by the anatomical and bacteriological studies of Onodi and Entz, is sufficient to prove that the leptothrix is of no ætiological importance in keratosis pharyngis. They cannot, however, agree with the view of the last two authorities that the cause of the disease is an epithelial proliferation due to slight but repeated inflammatory attacks, since, apart from other considerations, subjective symptoms are not infrequently absent.

Microscopical examination of tonsillar tissue removed from three cases of the disease showed the characteristic cornification of the epithelium lining the crypts, which were much widened by the horny masses. The horny change was not confined to the crypts, but extended over the surface of the tonsil. Instead of the diminution or absence of the cells of the Malpighian layer, described by Onodi and Liebenmann, this layer was found to be well represented, and in places even increased where the horny masses were greatest. Bacteriological examination of the plugs in each of the three cases showed, in addition to many of the organisms belonging to the ordinary flora of the mouth, numerous leptothrix threads and large numbers of a capsulated bacillus. The authors give the results of a careful study of this bacillus, which they are much inclined to regard as responsible for the disease. It is a short, rod-shaped organism with rounded ends, and is non-motile and sporeless. A prominent feature is the broad mucoid capsule which surrounds it. This capsule, which is well developed under all conditions of growth, stains best by Heim's method or with Giemsa's stain. The bacillus itself is stained by all the aniline dyes, and decolourises rapidly by Gram's method. It grows easily on all

the ordinary culture media, and displays a marked pathogenicity. White mice die of typical septicæmia sixteen to forty-eight hours after subcutaneous injection. The power possessed by the bacillus in each of the three cases of forming acid from different kinds of sugar was compared, after the method of Bertarelli, with that of other members of the capsulated bacilli. The result was that the bacillus present in two of the cases showed, both in this respect and in general cultural characteristics, a close relationship to the Bacillus pneumoniæ of Friedländer and the ozæna bacillus, while the organism present in the third case resembled rather the *Bacillus ærogenes lactis*. That bacilli not completely identical with one another may be responsible for one and the same disease, the authors would explain by the presence in each case of the broad homogeneous capsule devoid of limiting membrane. Dr. Hamm has shown that this capsule consists of nucleo-proteid, a substance well known to be an excellent vehicle for the transmission of ferments. The authors regard the facility afforded by this abundantly secreted mucoid substance for the continuous action of a virulent poison upon the cells of the mucosa as the probable cause of the keratinisation of the epithelium.

Agglutination experiments were conducted with a view to deciding the question as to whether or not the bacterial products were absorbed into the general system. They were, however, not conclusive.

Thomas Guthrie.

NOSE AND ACCESSORY SINUSES.

 Mosher, H. P.—A Case of Fatal Meningitis after Removal of the Anterior End of the Middle Turbinate; (2) Tobey, G. L., jun.— Fatal Result from Intra-nasal Operation. "Boston Med. and Surg. Journ.," May 30, 1907.

These papers may be taken together. The first case was a man, aged fifty, whose left middle meatus was "full to overflowing with pus." The operation was done to gain room for systematic examination for the source of the pus, which had been present some years. The middle meatus was packed with sterile gauze, which was removed next day, and the antrum syringed. Severe frontal headache was complained of. The patient returned home, and became irrational; was re-admitted two days later with septic meningitis. The frontal sinus was opened and found full of pus, the antrum entered via the canine fossa, the ethmoid curetted, and the sphenoid opened. Everywhere was foul pus. Patient never regained consciousness, and died within twenty-four hours. No autopsy. Mosher believes the packing walled back the pus and infected the meninges through the cribriform plate. He wishes he had opened the cranial cavity.

The second case was a man, aged fifty-eight. Muco-pus from anterior and posterior nares fifteen years. Polypi removed at intervals of from four to six months. Complete loss of smell five years. Both sides of the nose were filled with polypi and pus. Polypi were removed, and four days later the right middle turbinate was ablated, the ethmoid cells opened and curetted. As polypi protruded from the sphenoidal foramen, the anterior wall of the sphenoid was removed. The cavity was full of

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