

accompanied by enfeebled intelligence and memory, with difficulty in thinking and perverted disposition. A month later there were epileptiform seizures, with a disturbance of speech that followed and remained. There was, however, no headache, abnormal condition of the eye-grounds, dizziness, nausea, or vomiting. Only in the last few days did the patient complain of headache when questioned.

Thus there were absent symptoms that have been insisted upon by all authors as pathognomonic of brain tumors. The slow development of the symptoms and the spread of the paralysis, and the involvement of the so-called psych-motor centres, showed the location of the tumor, and as internal medication was of no avail, operation was decided upon. The operation disclosed a large chestnut-shaped tumor in the motor area, which involved the pons mater only in one point. The tumor was easily removed, as it was encapsulated and did not involve the brain cortex. The tumor was soft and pressed into the brain substance. It was about two and one-eighth inches long, one and three-quarter inches wide, and one inch thick. It was a cystic fibroma. The patient died shortly after the operation, of heart failure. The case illustrates the possibility of the presence of a cerebral tumor in cases where some of the symptoms that are considered characteristic are absent.

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## OTOLOGY.

UNDER THE CHARGE OF

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### TRANS-ILLUMINATION OF THE MASTOID CELLS.

DR. GEORGE W. CALDWELL, in the *New York Medical Journal*, vol. lviii., No. 3, considers the subject of the trans-illumination of the mastoid cells as a means of diagnosis of mastoiditis interna suppurativa. In view of the importance of determining, before any operation is performed upon the mastoid, whether or not there is any pus within this cavity, he suggests that a method of trans-illumination of these cells by means of a miniature electric lamp, and the conclusions to be deduced therefrom based upon the fact of the diaphanous nature of healthy mastoid cells and the opacity of the pus, will greatly aid the surgeon. He then describes an apparatus devised for this purpose: The apparatus required is a battery which will develop about ten volts, regulated to light well, but not to burn out a two- or three-candle power electric lamp of very small calibre. This is protected by a thin rubber tubing, fenestrated at one end, and made to fit snugly at the meatus by a washer of larger tubing. In a perfectly dark room the small electric lamp is inserted well into the external auditory meatus. He says: "Instantly the healthy mastoid is illuminated with a ruddy glow, extending from the apex to the lateral sinus and to the limits of the cells above. The reverse manner may

be more satisfactory in a given case, as when the canal is more obstructed and painful, and a larger lamp may be used. A speculum of large size being placed as for examination of the membrana tympani, the electric lamp encased in a rubber tubing projecting slightly beyond the limit is pressed against the mastoid and a current made, when the external auditory canal and middle ear will be filled with rosy light from the posterior wall. By placing the lamp on different portions of the mastoid the limitations of the cells and the position of the lateral (?) sinus may be accurately mapped out and the particular region in which a pathological process exists demonstrated. If the cells are occupied by a purulent collection the glow will be absent and the cells will be dark. Comparison with the opposite healthy side renders the diagnosis of pus in the mastoid cell complete, whether or not the usual symptoms are present, for suppurative mastoiditis may exist without external indications, which, indeed, is the most dangerous form, as the process tends to extend inward, not outward."

The writer claims that the method which he thus submits is scientifically accurate, easy of application, painless, strikingly pictorial, instantly decisive, and demonstrative to the patient's friends.

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#### THE SURGICAL PATHOLOGY OF THE MASTOID PROCESS.

DR. J. E. SHEPPARD, of Brooklyn, in the *Brooklyn Medical Journal*, vol. vi., Nos. 4 and 5, contributes a carefully written article on this important subject. The anatomy, primary mastoid periostitis, secondary mastoid periostitis, inflammation of the mastoid cells, sclerosis, condensing otitis, with symptoms and diagnosis of acute inflammation of the mastoid cells, and the prognosis are given with great completeness. Cerebral complications, such as meningitis, brain abscess, extra-dural abscess, diseases of the sinuses with phlebitis, thrombosis, and pyæmia, are also duly considered. Cholesteatoma, too, one of the most interesting conditions found in the ear, is considered. New growths in the lymphatic glands over the mastoid, fibrous polypi, and simple polypoid granulations, which may arise in the mastoid process and project through carious defects into the mastoid cortex behind the auricle, are also alluded to. Epithelioma and sarcoma are also mentioned. The indications for the operation are those so well known as not to demand a lengthy mention in this review.

The operation upon the mastoid is carried out with well-known antiseptic precautions. The article concludes with a consideration of Stacke's and Schwartze's operation on the mastoid for a maintenance of a communication between the ntrum and the outer ear.

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#### CHOLESTEATOMA OF THE EAR.

DR. HARRY FRIEDENWALD, of Baltimore, Md., under the above title gives a very interesting account of several cases of this disease. With quite a long consideration of the subject, it says that it is important to remember that there is a tendency for cholesteatoma or cholesteatomatous masses to recur. Patients are therefore to be examined at intervals of a few months for a long time after their apparent cure.

The treatment consists chiefly in the thorough removal of the cholestea-