

larynx. She had for some time suffered from recurrent attacks of hoarseness, from which, however, she had made rapid recoveries. During the previous few weeks the hoarseness had persisted, so that her voice was reduced to a mere whisper. At the same time she became breathless on the slightest exertion, and it was for this now rapidly-increasing dyspnoea that she sought relief. There was no family history of malignant disease, and the patient was well nourished and in excellent health in other respects.

Laryngoscopic examination revealed a growth occupying the posterior and lateral walls of the larynx, deficient abductor movements of the cords, which were pushed into the centre of the larynx, and enlargement of the arytaenoids. Owing to the history of slow growth, the absence of pain, and to the fact of there being present a considerable amount of local inflammation, a benign neoplasm was diagnosed. A portion of the growth was removed with the cutting laryngeal forceps for microscopical examination, and the patient was placed on iodide of potash. The growth was found to present the appearances of a fibroma underneath a normal mucous membrane.

In a week the patient returned with all her symptoms greatly exaggerated. Her face and lips were deeply cyanosed, loud, sonorous râles were heard during respiration, and mucus could be seen bubbling up between the cords. The symptoms were so alarming as to call for immediate operation, and after a preliminary tracheotomy the larynx was laid open from the lower border of the cricoid cartilage through the cricoid and the anterior angle of the arytaenoid to the base of the epiglottis.

A thickening mass was found extending from the lower border of the cricoid to above the vocal cords. The thickening was submucous, and extended down to the cartilaginous framework of the larynx, being most marked in the neighbourhood of the arytaenoids.

The mass of tissue was removed from the sides of the larynx with cutting forceps and curettes, and after the inner surfaces were cauterized with a saturated solution of trichloroacetic acid the cartilages were brought together with silver-wire sutures. A further microscopical examination of the tissue removed showed only the presence of connective-tissue hypertrophy. The tube was removed in a month, and the patient has remained since in perfect health. Her colour is good, and there has been no indication of a recurrence of the neoplasm or of a further contraction of the laryngeal passage.

Sandford.

E A R.

Francis, Alex. (Brisbane).—*Notes on a Case of Emphysematous Otitis, due to the Bacillus Aerogenes Capsulatus.* "The Australian Medical Gazette," October 20, 1900.

The patient, a woman, was quite suddenly seized with acute pain in the left ear, which rapidly increased in severity. On paracentesis being performed, a quantity of clear fluid bubbled out and the pain was relieved. About fifteen hours afterwards pain began in the right ear, and on examination a large bulla was seen on the posterior wall of the external auditory meatus, the drum apparently being healthy. On the bulla being punctured, a quantity of clear fluid and gas bubbled

out, the auditory canal being filled with gas bubbles, and the pain was relieved. Twelve hours afterwards, however, it returned in the right middle ear with great severity. Treatment with peroxide of hydrogen proved satisfactory, and, although there was considerable loss of tissue, the membrana tympani healed completely and the hearing became almost normal. The author appends a bacteriological examination of some cover-glass specimens of the fluid, showing that the *Bacillus aerogenes capsulatus* was present in considerable numbers.

StGeorge Reid.

Gibson, Lockhart J. (Brisbane).—*Useful Hearing obtained in a Deaf-mute aged Nineteen Years.* "The Australian Medical Gazette," October 20, 1900.

Notes are given of a case illustrating the importance of removing hypertrophied lymphoid tissue in the naso-pharynx, and the consequent improvement in hearing even after years of almost total deafness. The patient when operated on was nineteen years of age. She had been deaf since an attack of measles when she was eighteen months old. For six years she had been an inmate of a deaf and dumb institution. A considerable amount of hypertrophied tissue was removed from the naso-pharynx, with the result that in a month a very great improvement was manifested in her hearing. She could easily distinguish sounds, and to a certain extent carry on a conversation. After the operation the ears were regularly politized.

StGeorge Reid.

W. K. Hatch and R. Row.—*Fungus Disease of the Ear.* "Lancet," December 1, 1900.

In order to show the frequency with which fungus disease of the ear is met with in Bombay during the rainy season, our author (W. K. H.) collected all the cases treated at the Jamsetjee Jeejeebhoy Hospital during the month of October, 1899. He verified diagnosis by microscopical examination, and in several instances Dr. Row made a culture on agar agar. Medical practitioners in Bombay often speak of the liability to disease of the external ear in this climate, and they generally diagnose the conditions as furunculosis. In most cases the disease is really aspergillosis, and the small pustules seen in the canal are merely the result of a growth of a fungus. Von Roosa in his able work has tabulated several varieties, and he states that, in his opinion, the fungus is the cause of the eczematous condition of the canal and not secondary to it. It will be seen from the tabulated cases that in only one was there any pre-existing disease of the ear; this patient had a perforation and discharge some months before, which had been treated and stopped by means of nitrate of silver. The ear remained well until the appearance of a fungus; there was therefore no discharge seen before the symptoms were experienced. Formerly there had been several recurrences of discharge with inflammatory symptoms from the affected ear, and on none of these occasions was any fungus found, so that probably the fungus in all the cases was really primary. There appears to be a considerable difference in the symptoms due to fungus, varying from slight to considerable deafness, and attended by pain, which is occasionally severe. There is also a good deal of discomfort, generally described by native patients as "heaviness" and sometimes also "stiffness," but this symptom varies according as to whether the

canal is blocked up by epithelium and fungus, or whether the growth is merely a coating to the canal of slight thickness. In most cases the membrana tympani is obscured from view by the growth, or red patches may be seen on it here and there. Roughly speaking, cases may be divided clinically into dry and moist; in the latter class, the symptoms of eczema are present to a greater or less extent, and there is therefore a watery or slightly purulent discharge from the ear, and slight pain and deafness with a feeling of heaviness are usually complained of. In the majority of cases the *aspergillus niger* is found. There is a quantity of moist-looking epithelium on which black particles are plainly visible, having an appearance of grains of gunpowder. If the particles are plentiful, there is more black than white visible; but if there are only a few, it may not be easy to distinguish them readily. After syringing and the removal of the mass, the walls of the canal are seen to be red, and denuded of epithelium and often irregular, with small furuncles and swellings, and the membrana tympani may be bright red in colour or dull and sodden in appearance. Often the *aspergillus flavus* can be seen growing on the surface of small superficial pustules, and if in any quantity the small balls of sporangia are plainly visible. The growth of *penicillium glaucum* gives a fluffy appearance to the surface.

In the "dry" variety the symptoms of pain, uneasiness, and deafness are also complained of, but there is no discharge, and the canal on examination may be found either to be stuffed full of epithelial débris with yellow, black, or brownish-looking particles sprinkled on the surface, or the walls of the canal are coated with a crust, usually of a darkish colour, on which the fungus is seen growing. The appearance is not unlike that of rhinitis when dry crusts coat the surface of the mucous membrane; the tympanum is therefore visible, but the surface is generally partially coated with a similar fungus to that on the canal. Sometimes white patches on the tympanum also are met with, and they are difficult to remove. After syringing, the walls of the canal appear red but dry, and the membrana tympani is not so often inflamed as in the moist variety. Diagnosis is readily made after a few observations, and confirmed by microscopical examination; sometimes the amount of spores is largely in excess of the mycelium.

The treatment adopted in both varieties is the same, and it consists in syringing very thoroughly and using iodoform and boric acid in equal parts. The canal may be swabbed out with camphorated salol, but the drugs used are not of themselves so important as frequent cleansing. It is not necessary to say more than this, that cleanliness and dryness are most efficacious.

StClair Thomson.

James Kerr.—*Two Cases Illustrative of Cases of Sinus Pyæmia with Unusual Results.* "Lancet," October 13, 1900.

Increased attention is now being paid to aural diseases. The recorded mortality from otitis has increased from five to twenty-five per 1,000,000 in twenty years, between 70 and 75 per cent. of these deaths occurring in persons under fifteen years of age, so that the suppurative ear disease, so frequently neglected after the exanthemata, is of serious import to life within a few years. Its import arises from extensions beyond the middle ear leading to abscess or pyæmia. Ten years ago these suppurative complications were looked upon as almost fatal; they are of the gravest import still, and one of the most formidable is sinus pyæmia. Two cases recently seen are worth recording; they are

typical in clinical features, but unusual in the result. The treatment followed in both cases was by operative measures, and the use of anti-streptococcic serum.

One case proved fatal, although the sigmoid sinus was opened, the jugular tied, and anti-streptococcic serum used.

Post-mortem examination showed extension of the thrombus, back from the obliterated part of the sinus and up the petrosal sinuses, general discoloration of bone, erosion and purulent lymph about the jugular foramen, several perforations punched out of the vein wall, and communication from the floor of the tympanum through the jugular dome, by which route infection seemed to have spread.

The second was treated in the same way, and recovered.

The mechanism of these cases is usually a chronic suppurative otitis with extension to the mastoid antrum and cells, which discharge freely until suddenly, either from increased thickening of the mucous membrane or from slow thickening of the bone, the antral passage becomes blocked and discharge ceases. The first signal of danger—pain—follows, with violent inflammation from the retained pus, which often in children breaks its way through the ununited squamoso-mastoid fissure, but in others more often finds its way into cerebral, sigmoid, or cerebellar fossae. The usual route leading to sigmoid sinus pyæmia is perforation from the antrum into the knee of the fossa, but in Case 1 the perforation appears to have followed a very unusual route in perforating the jugular dome. When the local focus becomes diffused and the chest becomes affected, recovery can scarcely be expected, yet this took place in Case 2, and probably was greatly aided by the use of the anti-streptococcic serum. With a rapid pulse and pyæmic temperature early exploration of the sinus should be made, and if it be found to be affected, operative measures for the thorough removal of all septic material should be resorted to.

StClair Thomson.

Richards.—*Unusual Case of Traumatic Rupture of the Membrana Tympani.* "New York Medical Journal," October 6, 1900.

Traumatic rupture of the membrana tympani occurred in a fireman who was struck on the head at short range by the stream from a hose. He was stunned for a time, and after a few hours the ear began to discharge. He came under observation three days later, complaining chiefly of tinnitus. The canal was cleansed, and iodoform inserted. Similar cases have been reported of rupture of the membrane by waves striking the head while bathing and during heavy firing. It is interesting to note that in the latter connection several cases of traumatic rupture of the membrana tympani occurred amongst sailors working the turret guns during the bombardment of Santiago. In all the instances recorded the symptom most complained of was tinnitus, the loss of hearing being usually not extreme and only temporary.

Sandford.

Stillson, Hamilton.—*Some Experiments on the Relation between Audition and the Circulation of the Blood in the Head.* "Jour. Amer. Med. Assoc.," November 10, 1900.

The paper is based on the experience of the writer when he had tinnitus and slight defect in hearing as the result of a tubal catarrh. Politzer states that often, in tinnitus caused by tubal catarrh, brushing the cuticle in the region supplied by the trigeminal will cause the

tinnitus to disappear, but the writer found that it caused it to increase. Fixing attention on the tinnitus would increase its intensity, and brushing the hairs at the external orifice of the auditory meatus would cause a different tinnitus, found to be caused by the contraction of the muscles in that vicinity. Pressure on the mastoid increased the tinnitus, and also raised its pitch. A fact not mentioned by writers is that pressure on the mastoid lessened the hearing power, especially for high-pitched sounds. When lying down, the tinnitus was increased and the hearing distance lessened in his own case; while in a patient who had sclerosis of the middle ear the hearing was much increased.

Oscar Dodd.

PHARYNX.

Pierce, Norval H.—*Hypertrophy of Pharyngeal Tonsil: its Anatomy and Physiology.* "Jour. Amer. Med. Assoc.," November 3, 1900.

Its ultimate nature is unknown at the present time, whether it is an evolutionary vestige or a gland which has still a function. Embryologically, it develops with the pituitary body and pineal gland, and probably there is a relationship existing between these three bodies. It is composed of lymphoid tissue, similar to the solitary follicles of the intestines, and, together with bloodvessels and nerves, is enclosed in a bag of connective tissue. Early in life this connective tissue is embryonal in character, and matures later; then, following the law of connective tissue, it contracts, thereby squeezing the lymph nodes, shutting off the blood-supply, and inducing atrophy and shrinkage. Adenoids are this normal tissue hypertrophied.

The author describes a specimen, showing the peculiar fan-shaped distribution of the bloodvessels, which are surrounded by connective tissue. This apparently holds the bloodvessels open, thus increasing the blood-supply to the gland, which may account for the hypertrophy in some of these bodies. Hypertrophy is most frequently caused, however, by a succession of attacks of acute inflammation, the acute infectious diseases, acute inflammation of the gland itself, and inflammation due to streptococcus infection. Its relation to tuberculosis is important. There can be no doubt that some of these glands become tuberculous.

Oscar Dodd.

REVIEWS.

Beiträge zur Frage der Volksheilstätten. (Contributions to the Question of Popular Sanatoria.) By Dr. H. WEICKER. A. Hirschwald, Berlin. 1901. 8vo. Pp. 70.

From the material at his disposal the author has succeeded in making an important addition to the literature of the subject. The year 1899 was the sixth since "Krankenheim," a people's sanatorium for pulmonary tuberculosis, came into existence at Goerbersdorf, under the leadership of Dr. Hans Weicker. The sanatorium has been gradually