

Abstracts

EXHIBIT by Dr. DOUGLAS GUTHRIE.

X-ray Films of Abnormally Large Frontal Sinus.

J.L., a well-built young man of 23 years, complained of swelling of the left frontal region and of occasional headache and pain behind the left eye. The swelling, which consisted simply in a diffuse prominence of the left eyebrow, had been present for five or six years. Intranasal examination was negative. A diagnosis of frontal mucocele was considered, but radiography showed a healthy though large frontal sinus. After the patient had been reassured as to the absence of disease, his subjective sensations disappeared. The father of the patient had a rather prominent forehead, and an X-ray film revealed large frontal sinuses on both sides.

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EAR

The Experimental production of Deafness in young Animals by Diet.

EDWARD MELLANBY. (*Journal of Physiology*, 1938, xciv, 380-98.)

In a series of publications since 1926, the writer has shown that degenerative changes in the nerves of both central and peripheral systems of young animals can be produced by diet. The two factors are (1) deficiency of vitamin A and carotene, and (2) presence of much cereal, the former being the more important. One of the afferent nerves affected under such conditions is the VIIIth cranial nerve, and more especially the cochlear division. The histological changes in the labyrinth capsules of young dogs fed for some months on diets of normal foodstuffs, but deficient in vitamin A and rich in cereals, revealed the following changes.

(a) Degeneration of different degrees up to complete disappearance of the cochlear nerve, the cells of the spiral ganglion and their central and peripheral branches.

(b) Degeneration, but to a lesser degree, of the vestibular division of the VIIIth nerve.

(c) Overgrowth of bone in the modiolus and of the periosteal layer of the capsule near the brain.

This overgrowth of bone is apparently responsible for the degenerative changes in the nerves by reason of the pressing and stretching of these tissues.

Serous labyrinthitis also develops in the cochlea of the dogs on a vitamin A-deficient diet. This condition seems to produce a degeneration of the sensory epithelium of the labyrinth, including that of the organ of Corti and of the ampullae of the semicircular canals, in course of time. The bone and nerve changes precede the development of the labyrinthitis.

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The substitution of potato for the cereal element of these vitamin A-deficient diets greatly reduces the abnormal changes in the labyrinth above described.

It is suggested that cereals have a toxic action and hasten the pathological changes in the absence of vitamin A and that their replacement by potato reduces this action, or that the small amount of carotene in potato is sufficient to prevent pronounced degenerative changes.

The histological technique was similar to that which has been so successfully employed by Mr. Peet and Dr. Hallpike at the Ferens Institute. Fifty-one labyrinths were examined. The four plates which illustrate the paper show the degenerative changes very clearly, especially as the writer has adopted the valuable expedient of including in each case a section of the normal tissue for comparison.

DOUGLAS GUTHRIE.

On the ability to Localize Sounds. BRUNZLOW. (*Hals-, u.s.w. Arzt*, 1939, xxx, 1-6.)

Human beings have lost the ability to turn the auricles towards the source of sound, but compensate for this loss of mobility of the auricles by movements of the head. Localization of sound depends chiefly on listening with both ears (diotic hearing) and in accurate localization of fine, distant sounds the head is turned in the direction of the sound. Various observers have proved that localization with one ear is possible, although it is far less accurate than with both ears. In laboratory experiments of localization with one ear the author used an ordinary Bunsen burner as the source of sound. The ear may be aided by a funnel-shaped hearing tube. When the hearing tube pointed directly towards the flame the faint hissing sound was enriched by many low-pitched notes which were not heard without it.

The natural "field of hearing" of each auricle is a wide angle forwards and sideways. In front there is a slight overlapping of the two angles. Sounds which come directly from the front fall within the fields of hearing of both ears and are therefore most accurately localized. When we search for the direction of a sound we tend to direct our eyes towards it. The quality of a sound varies with the angle of incidence and this is the main criterion in localizing its direction.

J. A. KEEN.

On the question of the use of Wilde's Incision. B. SCHMIDT and P. NASSUPHIS (Hamburg). (*Monatsschrift für Ohrenheilkunde*, 1939, lxxiii, 24.)

In sucklings with suppurative otitis media, the pus sometimes finds an outlet through the squamo-mastoid fissure and forms a

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retro-auricular subperiosteal abscess. This appears shortly (one to three days) after the onset of the otitis. Such cases do well with a simple Wilde's incision, recovery being usually uneventful and further operation unnecessary.

When there is actual bone destruction, mastoidectomy is, of course, indicated. The retro-auricular swelling due to mastoid disease usually requires ten to fourteen days to develop. The time between the onset of the otitis and the appearance of the abscess is therefore a factor in the differential diagnosis of the two conditions.

DEREK BROWN KELLY.

Observations on latent Sinus-thrombosis. G. XANTHAKOS (Athens). (*Monatsschrift für Ohrenheilkunde*, 1939, lxxiii, 33.)

The diagnosis of latent otogenous sinus thrombosis is often difficult owing to the symptoms of the condition being overshadowed by those of the latent mastoiditis. In one of the author's cases vomiting occurred, and in another severe headache and a slight Kernig's sign were present. These symptoms may be considered as being suggestive of latent sinus thrombosis.

The prognosis of the condition is more favourable when the mastoid process is well pneumatized. In such cases the resistance to infection is usually good, and the invading organism of relatively low virulence. Chronic cases with sclerosed cortices, on the other hand, do not do so well and tend to develop suppuration in the sinus and invasion of the dura.

Treatment of latent sinus thrombosis consists in a complete exenteration of mastoid cells and a wide exposure of the sinus. The wall is not incised, however, unless suppuration has taken place. In such cases ligation of the jugular vein is also carried out.

DEREK BROWN KELLY.

Progress in the Surgery of the Ear (Exposure of the Internal Carotid Artery). OTTO MAYER. (*Wiener Klin. Wochenschrift*, 37, 51.)

The writer reviews the various routes by which an apical or pyramidal abscess in the temporal bone may be approached and drained.

Radiography is of great importance not only as regards diagnosis but as an aid in deciding upon the most appropriate line of approach.

If the location of the abscess and the presence of granulation tissue on the inner wall of the antrum suggests the existence of a fistula through the bony massive surrounding the semicircular canal system the opening up by curettage of this fistula offers the easiest line of approach. When this is not feasible two other lines of approach are possible.

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After elimination of all disease in the mastoid process the middle fossa dura may be laid bare and elevated inwards and forwards from the petrous pyramid until it becomes possible to open the abscess from above with chisel or spoon. Owing to its inherent dangers this method is condemned. In the second method a passage is attempted under the cochlear capsule. This is, however, only feasible when a lead is given by the presence of a fistula, otherwise the jugular bulb is in serious danger of injury. In order to overcome this difficulty Ramadier in two cases succeeded in reaching the abscess by freeing the internal carotid artery in its bony canal pushing it forward and opening the abscess with a small spoon. Several other surgeons have successfully employed this subcochlear line of approach, amongst them the writer, in four out of the five cases he attempted.

Ramadier's operation entails big technical difficulties to obviate which the author has had special long-handled delicate instruments, especially sharp spoons, devised. As a preliminary to exposure of the internal carotid artery a radical mastoid operation must be carried out with removal of the anterior wall of the bony meatus (*os tympanicum*) in its whole extent. In this way it becomes possible to insert a retractor and draw forward the soft parts together with the head of the mandible. This ensures a good view of the anterior part of the tympanum and allows of the insertion of a probe into the eustachian tube. The sharp spoon is now used to remove the usually profuse granulation tissue and also the bone from this region until a small non-pulsatile membranous area becomes evident. This is the periosteum of the carotid canal, which area is now gradually enlarged until the whole knee of the artery is exposed. The periosteum is now retracted so that it becomes possible to press the artery well forward. A small chisel is now placed in the bony groove and driven towards the apex with light blows of the hammer. When the abscess is opened the pus will flow, often in surprising amount.

The orientation of the artery is rendered difficult by the absence of pulsation, the latter being absorbed by the surrounding sinus caroticus.

It is both unnecessary and inadvisable to place a drain in the abscess. All that is needed is to press the carotid forward with a probe at each dressing and so allow any accumulated secretion to escape. The latter soon ceases.

The eventual existence of large infected peri-tubal cells communicating with the apical abscess may necessitate the use of a spoon laterally around the knee of the carotid artery which, incidentally, enlarges the path to the abscess.

A disadvantage of the operation is that it requires a removal of

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the ossicles and it should therefore only be performed to eliminate a vital danger.

Mayer hazards the opinion that by this method it might be possible to approach and open a thrombosed cavernous sinus.

Two cross-section anatomical diagrams of the regions involved accompany this article.

J. B. HORGAN.

Otogenic Metastatic Meningitis. ERNST URBANTSCHITSCH. (*Wiener klin. Wochenschrift*, xxxviii, 51.)

The clinical record of a case, unique in the author's experience, of metastatic meningitis, fatally complicating a case of acute middle-ear suppuration, of scarlatinal origin, in a child aged 4½ years.

The child was admitted to hospital ten weeks after the onset of scarlatina and one month after the beginning of a complicating mild suppurative otitis media with mastoiditis.

The symptoms on the one hand suggested a typical suppurative meningitis (cervical rigidity, Kernig, vomiting, cloudy cerebrospinal fluid with a very large number of cells) whilst on the other hand the general condition of the patient, the absence of marked pyrexia and the local ear symptoms were not consonant with a meningitis of otitic origin. An immediate smear of the spinal fluid did not show any bacterial growth.

The mastoid was, however, freely opened up with wide dural exposure. The existence of mastoiditis was confirmed but there was no evident inward path of infection.

The child's condition was materially better immediately following operation but convulsions followed by death occurred suddenly 48 hours later.

An exhaustive post-mortem examination revealed the presence of two small (the size of a threepenny piece) collections of pus in the sub-leptomeningeal space, one over the cerebellum and another over the anterior pole of the temporal lobe, both on the contralateral side. Cultures from these as well as from the mastoid abscess and the cerebrospinal fluid all gave a pure growth of streptococcus hæmolyticus. The other organs were quite free of either primary or secondary infective foci.

J. B. HORGAN.

The treatment of Otogenous Vertigo with Monotrean. A. V. BÁRÁNY (Gheorgeni, Roumania). (*Monatsschrift für Ohrenheilkunde*, 1939, lxxiii, 31.)

After reviewing some of the causes of vertigo, the author describes his results of treatment with Monotrean, which he considers the most effective drug for the symptomatic treatment of this condition.

Nose

The combination of quinine and papaverine seems to have a selective action on the labyrinth. The papaverine diminishes the tonus of smooth muscle, and consequently deals with any angiospasm in the vestibule.

A course of treatment lasts six weeks, three Monotran tablets being taken daily after food. The course may have to be repeated two or three times. Out of 23 cases (two being still under observation) 17 were completely cured, and 2 considerably improved. In only two instances was the drug ineffective, one patient having a neuritis of the VIIIth nerve due to quinine overdosage (for malaria) and the other having a positive Wassermann reaction.

DEREK BROWN KELLY.

NOSE

Choanal Polypus in the Child. P. MANGABEIRA-ALBERNAZ. (*Revista Oto-laringologica de S. Paolo*, vi, 5, September-October 1938.)

Nasal polypus is rare in childhood. The writer observed only six cases among 8,000 patients. The polypus is of the solitary type, arising in the maxillary sinus, independent of suppurative and extending through the ostium maxillare to the choana.

The literature is reviewed (30 references) and detailed notes of four cases are included, with X-ray films and micro-photographs.

DOUGLAS GUTHRIE.

PHARYNX

Primary Abscesses of the Pre-styloid Region (Meta- and Paratonsillar). MM. PIQUET et COULOUMA. (*Les Annales d'Oto-Laryngologie*, September 1938.)

Some authorities have denied the existence of primary abscesses external to the pharyngeal wall. Although the authors admit that the great majority of peritonsillar phlegmons are situated in the cellular tissue between the tonsil and the muscular bed, they contend that this is not so in all cases, and adduce in support of their view the clinical histories of three cases with diagrammatic anatomical drawings to reinforce their contention. The clinical history of these cases resembles very closely that of the usual quinsy. The treatment of these cases is surgical. The authors advise a separation of the tonsil from its fossa and exploration through the muscular wall with a blunt seeker.

M. VLASTO.

A new treatment for aborting Quinsies. GEORGES GOUFAS. (*Les Annales d'Oto-Laryngologie*, November 1938.)

The author discusses the case of the patient who suffers from dysphagia associated with marked œdema of the uvula and a greater

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or lesser degree of trismus and pyrexia. Primary uvulitis is very rare, and in the vast majority of cases the œdema is an expression of a peritonsillar inflammation which, in the type of case envisaged by the author, has not yet reached the stage of suppuration. Many hold the view that œdema of the uvula is pathognomonic of pus formation in the vicinity, but the author does not agree with this. He instances the number of occasions on which an adequate incision is made through the inflamed tissue without a drop of pus being released. It is precisely in this type of case that excellent results have been obtained from intramuscular injections of Omnadine. The action of the drug may be due to a "protein shock", but unlike the effect of protein lactate, the injections are unaccompanied by rigors or by a rise of temperature. Although dramatic cures are frequently obtained, a few cases do not react and proceed to pus formation. There are reports of ten cases.

M. VLASTO.

LARYNX

Tomography of the Larynx. FELIX E. LEBORGNE. (*Anales de Oto-rino-laryngologia del Uruguay*, viii, 3, 1938.)

The author, who claims to have been the first to draw attention to this valuable method of X-ray examination (July 1936), illustrates its importance in the accurate diagnosis of laryngeal cancer. Only by the employment of three methods of examination, namely, laryngoscopy, lateral radiography and (frontal) tomography can the extent of the tumour growth be exactly delineated.

The paper is illustrated by fifteen figures, each showing the laryngoscopic picture, the tomograph as seen in the film, and a diagrammatic key to each film.

DOUGLAS GUTHRIE.

MISCELLANEOUS

Tuberculosis of the Nose, Mouth and Pharynx. W. KUSNIERCZYK. (*Polski Przegląd Oto-laryngologiczny*, 1938, xv, 12.)

Since the inauguration of a special clinic for the treatment of tuberculosis of the upper air passages, 654 cases have been treated during three years. In 30 per cent. the larynx was affected, in 70 per cent. the air passages above the larynx. Lupus affected the larynx in 23 per cent., and the other parts in 90 per cent. of cases. The nose was the seat of lupus in 82 per cent. of cases.

Primary tuberculous infection of the nose is not uncommon. The anterior parts of the septum and of the middle and inferior turbinates are the usual sites. Often subjective symptoms are absent. The disease is more than twice as frequent in women than in men.

General Notes

Tuberculosis of the buccal cavity is rare, and still rarer are the cases due to trauma. One such case is reported, following dental extraction.

Prognosis is more favourable in lupus than in other forms of tuberculosis, and depends upon the general condition of the patient. The most useful form of treatment is diathermic puncture.

A bibliography of 271 references is given.

DOUGLAS GUTHRIE.

Vestibular Disturbances in the Influenza Epidemic of the Winter, 1937-8. E. ERDELYI (Szeged). (*Monatsschrift für Ohrenheilkunde*, 1938, lxii, 1131.)

The influenza epidemic of the winter, 1937-8, affected the greater part of Hungary. The disease exhibited symptoms of acute nasopharyngitis and ran a long and stubborn course. A few sporadic cases of acute encephalitis were observed.

The author was struck by the number of instances in which symptoms of labyrinthine irritation were present. Eleven cases with vomiting, vertigo and nystagmus were carefully examined. It was discovered that there was no involvement of the central nervous system, the symptoms being entirely due to the action of toxins on the vestibular and otolith apparatus.

In conclusion the author maintains that in an influenza epidemic the number of cases showing evidence of labyrinthine irritation is greater than is generally supposed and that symptoms formerly attributed to "meningeal intoxication" are really due to this cause.

DEREK BROWN KELLY.

GENERAL NOTES

ROYAL SOCIETY OF MEDICINE.

1 Wimpole Street, London, W.1.

Section of Laryngology. The next meeting of the Section will be held on Friday, May 5th, at 5 p.m.

There will be a discussion on "Complications of Intranasal Surgery." Openers, Mr. Walter Howarth, Mr. E. D. Davis.

President: C. A. Scott Ridout, M.S., Clarendon Road, Southsea.

Hon. Secretaries: M. L. Formby, F.R.C.S., 3 Queen Anne Street, W.1; J. C. Hogg, F.R.C.S., 106 Harley Street, W.1.