SOCIETIES' PROCEEDINGS

ROYAL SOCIETY OF MEDICINE—SECTION OF OTOLOGY.

November 6, 1931.

President—Mr. NORMAN PATTERSON, F.R.C.S.

Tumour of (?) Meninges causing Ear Symptoms and involvement of certain Cranial Nerves.—NORMAN PATTERSON, F.R.C.S.

Male, aged 56. Deafness and tinnitus in right ear since 1918—after influenza. Noise always continuous, never pulsating. Bleeding from right ear followed a slight sneeze, 23rd January 1931; blood poured from the ear for about four minutes; afterwards repeated small hæmorrhages. Granulation tissue was noticed in the meatus. April 1931, severe hæmorrhage from right ear, lasting one hour and twenty minutes, stopped by gauze plug soaked in adrenalin. Wasting of right side of tongue observed. Blood-pressure, 160/125. Slight recurring hæmorrhage; on 5th August 1931, severe hæmorrhage. Admitted to hospital 6th August and kept in for eight weeks. During my absence my colleague, Mr. Morris, intended to operate, but instead he removed a fragment of "polypus" for section. X-ray treatment was given on 18th September. No more bleeding since then. Before that there had been a little bleeding almost every day, preceded by slight headache. The headaches recently have been continuous—they are located in the occipital region. With Bárány box in the left ear he can hear loud-spoken words at about 6-9 inches. He feels that he would spin round if he did not hold his head straight. Dizziness has been severe during the last five weeks. Voice has been husky since April 1931. During the last two or three months patient has had to wash solid food down with water.

On examination.—There are a few small venules over the right mastoid process and there is an artery pulsating over this process. There is very slight weakness of the upper and lower face. According to one observer there is wasting of the right side of the soft palate and right sterno-mastoid. Another observer states that there is slight deviation of the palate to the left on phonation, and possibly slight weakness and wasting of the right sterno-mastoid. The tongue is much wasted on the right side and deviates strongly to the right. Skiagrams show apparent increase in vascularity and density of the right temporal bone and the right parietal bone immediately above

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it. The sella turcica is slightly enlarged, with slight erosion of the clinoid processes. In one skiagram the right external auditory canal has a rather irregular outline.

Mr. Hugh Cairns, to whom I am greatly indebted for his thorough investigation of this case, thinks that the patient is suffering from a tumour of the right cerebellopontine angle affecting the twelfth and, to a lesser extent, the eleventh to the seventh nerves inclusive. He considers that the histological appearance suggests a hæmangioblastoma or possibly an angioblastic meningioma. The pathological department of the hospital label the tumour "hæmangio-endothelioma."

Plexiform Angeioma.—M. VLASTO, F.R.C.S.

Mrs. H., aged 63, came to the West London Hospital complaining of unbearable tinnitus on the left side. She had first noticed the tinnitus six months ago. The noise is pulsating, and is worse when the head is in the dependent position.

There is a network of enlarged vessels behind the left ear, and a soft thrill is easily distinguishable with the fingers. With the stethoscope one can hear a loud murmur over a relatively wide area. There is little doubt that the diagnosis is a plexiform angeioma. The case is shown partly because tinnitus from this cause is uncommon, but particularly because suggestions as to treatment are requested. Dr. Isabelle Horsley, who sent the patient to see me, is insistent that some treatment must be carried out, on account of suicidal tendencies.

Blood-pressure 160/90. Skiagrams of the skull are shown.

Mr. SOMERVILLE HASTINGS said the extraordinary feature of this case was that the symptoms had been noted for six months, though one thought of this as a congenital condition, or one which was early evident.

If pressure was made on the common carotid, the bruit ceased; so that apparently the tumour was fed mainly by the common carotid and its tributaries. If the tinnitus disturbed the patient, as the history indicated, it would be worth while to tie the common carotid, though the procedure might not be a success, as an anastomotic circulation might be established and the symptoms return.

Mr. ALEXANDER SHARP said he had been interested in the patient's statement that during the last three weeks the symptoms were much relieved after the feeling of a bang in the head on two occasions. Was the explanation of the bang that the obstruction to the blood-flow suddenly gave way?

Mr. HERBERT TILLEY said that the symptom of hearing "a bang in the ear" interested him because on rare occasions, and when falling off to sleep, he had experienced it, and it was very disturbing. In Gowers' textbook the author ascribed the symptom to a sudden contraction of the stapedius muscle.

The PRESIDENT said that six years ago a medical colleague sent him a somewhat similar case, in an old gentleman. The external carotid was tied, and the symptoms disappeared at once and had not returned.

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Mr. VLASTO, in reply, said that he had no explanation to offer as to why the tinnitus had come on so suddenly six weeks ago. Until it had been demonstrated to him in the adjoining room, he had been under the impression that compression of the carotid did not stop the pulsation. He now agreed that it did; at the same time, he would add that the murmur and thrill were less marked at the present time than at any time during which the patient had been under his observation. If consent were obtained, he would ligate the external carotid as suggested, and show the case at a later meeting. Skiagrams of the skull showed that the cranial sutures were abnormally evident, and Dr. Worth had suggested that there was evidence of increased intracranial tension. There appeared to be a possibility—as Dr. Parkes Weber and others had pointed out—of an associated vascular tumour of the meninges, in which case a perfect result from the operation might not be achieved.

Fractured Base of Skull, with Severe Complications. Recovery.—WILLIAM IBBOTSON, F.R.C.S.Ed.

Woman, aged 25. First seen 16.8.30.

History.—16.8.30.—Motor accident, resulting in a fracture of base of skull; hæmorrhage from both ears; conscious, but severely concussed.

19.8.30.—Paresis of right seventh cranial nerve, with fibrillary twitchings under right eye; no other cranial nerves affected.

20.8.30.—Complete right-sided facial paralysis.

25.8.30.—Patient had a fit, initiated with a right-sided aura and affecting the right side of the body.

30.8.30.—Severe headache on right side; definite evidence of acute mastoiditis (right), there having been suppuration from the tympanic cavity for several days. A slight serous discharge still persists from the left ear.

Operation.—Conservative mastoid drainage, right; much free pus and altered, stale blood being evacuated, thus revealing a fine, tortuous fracture, extending vertically upwards through the squamous bone. As more bone was removed superiorly, hæmorrhage became much more profuse and pulsating, so that it was soon obvious that some important artery was bleeding. Sub-temporal decompression was then performed, when the middle meningeal artery was found to be ruptured in its passage in the groove on the great wing of the sphenoid. Ligature being quite impracticable, I decided to apply cut muscle to the bleeding-point, and this was done with a portion of temporal muscle. The effect was very rapid, for the bleeding soon ceased, nor did it ever recur.

Progress.—There was persistent and troublesome suppuration, both beneath the scalp flaps and in the mastoid region, but eventually this ceased and to-day the condition is as follows:—

Wounds healed; no sign of facial paralysis; hears a whisper with right ear at 25 feet; general health excellent; is back at work.

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Societies' Proceedings

Specimen of a Temporal Bone, with congenital absence of the External Auditory Meatus.—E. D. D. Davis, F.R.C.S.

The specimen was obtained from a woman, aged 56, who died from a fractured skull.

The auricle was rudimentary and deformed, with no sign of an auditory meatus. The temporal bone was dissected and with a fret-saw thin layers of dense cancellous bone were shaved off until the middle ear and mastoid antrum were exposed. There was no indication even of the position of the meatus, and both the middle ear and mastoid antrum were covered by a considerable thickness of cancellous bone. There was no drum and no malleus, but the inner wall of the middle ear, Eustachian tube, and canal for the tensor tympani are normal in appearance. The incus and stapes, which can be seen, are deformed. The mastoid antrum, internal auditory meatus, and auditory and facial nerves are normal.

There is an abnormally deep Meckel's cave for the Gasserian ganglion.

Recovery after Meningitis with Hæmolytic Streptococci in the Cerebrospinal Fluid under Direct Observation.—T. B. Layton, D.S.O., M.S.

John F. N., aged 25. Had had ear discharge for twenty years when on 24.2.31 he noticed that something had come out of the ear. He was treated at his own home for twelve days, during which period headache was at times so severe that he did not sleep for four nights.

On 9.3.31 he was admitted to hospital and a polypus was removed under general anæsthesia. Twenty-four hours later he was transferred to the S.E. Fever Hospital as a case of cerebrospinal meningitis.

Admitted at 10 P.M. The diagnosis was accepted provisionally by the admitting medical officer, who performed a lumbar puncture, drew off 60 c.c. of turbid fluid under high pressure, and injected 40 c.c. of anti-meningococcal serum. When seen by me next morning there was profuse left ear discharge and the patient was in an advanced stage of meningitis, with rigid neck and back and Kernig's sign. A further lumbar puncture was done on this morning (11.3.31) and 35 c.c. of fluid were withdrawn, 25 c.c. anti-meningococcal serum were injected into the theca, a further 25 c.c. being given intravenously. The report from the laboratory on this fluid stated that numerous Gram-positive diplococci and short-chained streptococci were seen in the fluid on direct examination; a subsequent report stated that there was a pure growth of hæmolytic streptococci with abundant colonies.

The mastoid was opened at 5 P.M., *i.e.*, forty-eight hours after the removal of the polypus. A dense bone was found. From the roof of the middle ear a track of disease could be traced to the floor of the middle fossa, but no definite change could be recognised on the dura

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mater. The pinna was tied and sewn forward and the cavity hosed with a gallon of saline.

This hosing was repeated thrice daily for three days and then continued with decreasing frequency till the end of the week, when he was out of danger.

12.3.31 A.M.—Lumbar puncture, 25 c.c. 10 P.M., lumbar puncture, one or two drops only.

14.3.31.—Lumbar puncture, 25 c.c., not so turbid. 40 c.c. anti-streptococcal serum intravenously.

16.3.31.—Lumbar puncture, 15 c.c., almost clear.

The wound and drumhead are now healed.

Acute Mastoiditis and Meningitis with Streptococci observed on Direct Examination of the Cerebrospinal Fluid.—R. J. CANN, M.S.

J. B., a girl aged 19, admitted to Guy's Hospital with signs of acute mastoiditis and meningitis.

Mastoidectomy performed; pus and granulations found in antrum and cells. Dura mater of both fossae was exposed and appeared normal. Lumbar puncture produced turbid fluid in which streptococci were demonstrated on direct examination and by subsequent culture. Recovery after repeated daily lumbar punctures.

An Unusual Case of Zygomatic Mastoiditis.—W. A. MILL, M.S.

Frank F., aged 7, first seen 31st April 1931. Had had earache for four days and a blood-stained discharge for one day. Temperature, 101° F.; marked tenderness over mastoid. Small swelling in parotid region, just in front of tragus. Appearance suggested adenitis of pre-auricular glands, but no cause could be found for this. The swelling was well below the zygomatic arch and the latter was not tender. Nor was there any swelling in the temporal fossa. Marked trismus was present.

The same evening, at operation, extensive disease was found in the mastoid. The lateral sinus and dura of the middle fossa were exposed.

Cells were found in the root of the zygoma and it was thought that healthy bone had been reached in this direction.

Following operation, the pre-auricular swelling continued to increase, and finally fluctuation was detected. The swelling was limited above by the zygomatic arch and suggested at first sight the swelling of mumps.

On 7th May the abscess was opened and a tube inserted. When a finger was introduced into the wound it was found that the deep surface of the zygoma was bare. It was decided not to remove it but to await developments.

The patient's condition improved greatly but trismus continued to

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be marked. On 16th May another anæsthetic was given; the zygoma was found to be completely bare of soft tissues and its surface was roughened. The arch was removed up to and including part of the malar bone.

The original mastoid incision was prolonged upward and forward, and a search was made through the posterior wound for cells in the zygomatic region. A few small cells were found just above the temporo-mandibular joint.

Healing proceeded steadily, except that an enlarged cervical gland suppurated and required incision. The tympanic membrane is now intact.

The case is shown because the limitation of the swelling to the parotid region is regarded as unusual.

AUSTRIAN OTOLOGICAL SOCIETY.

Proceedings of Meeting of June 1, 1931.

(*From the Monatsschrift für Ohrenheilkunde*, August 1931.)

Abstract of Proceedings by A. R. TWEEDIE, F.R.C.S.

***Streptococcus viridans* as Causative Organism of Suppurative Otitis Media** — E. GRABSCHEID. — A man, aged 30, previously healthy, was admitted on the 18th of May with the history that three months ago, following attack of influenza, he had suffered from an acute inflammation of the right ear, which had never before been the seat of disease. Spontaneous discharge had occurred and, four weeks later, continually increasing swelling had been noted behind the ear, accompanied by headache localised around this region. Five days before admission the swelling had suddenly subsided.

Examination.—Ears: *Right*—Profuse purulent secretion—infiltration of the postero-superior meatal wall—antero-inferior perforation, mastoiditis. *Left*—Membrane was intact, indrawn, and opaque. Conversation: right, a.c.; left, 10 metres. Bone conduction normal. Rinne: right, negative; left, positive. Caloric reaction normal.

At the *operation*, undertaken forthwith, the mastoid was found to be markedly cellular in structure with purulent content and profuse granulations, the apex, where pus under pressure was relieved, being principally affected. On further investigation of this area the abscess was found to communicate with the posterior cranial cavity and the digastric fossa, the sigmoid sinus being thus exposed.

Convalescence was normal.

A pure culture of *Streptococcus viridans* was obtained from the abscess and the case was shown as an instance of this very rare form of infection.

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