RETROSPECT OF OTOLOGY, 1906.1

By Dundas Grant, M.D., F.R.C.S.Eng., and Chichele Nourse, F.R.C.S.Edin.

Considering the number of workers in the field of otology, one is not surprised at the amount of material accumulated during the year. Although the work done in the shape of clinical, anatomical, and pathological studies has been large, the actual advance in scientific knowledge has been small, and the past year has not been marked by any striking discovery.

The meeting of the British Medical Association at Toronto gave an opportunity to the otologists of the Eastern and the Western worlds to compare their views and modes of practice, of which they gladly availed themselves. It was to be regretted that on such an occasion the amount of time which could be devoted to otology was so limited. A subject of such importance might well have been accorded a separate section.

From our reports it will be seen that at least one very important otological question was discussed, namely the "Indications for Ligature of the Jugular Vein in Otitic Pyamia." Mr. Hugh E. Jones (498) opened the discussion in a very liberal spirit, and referred with some approval to the views laid before the Otological Society by Dr. Dundas Grant regarding the desirability of avoiding the ligature in many cases. Dr. McKernon's experience (507) was in unqualified favour of a primary ligation of the jugular vein. Mr. Hugh Jones's conclusions will probably receive ultimate acceptance, but for the present the last word on the matter has not yet been said, and the discussion will well repay perusal.

At that meeting, inter alia, Dr. Gorman Bacon (469) discussed "Conservative Methods in the Treatment of Aural Diseases," and Dr. MacCuen Smith (457) read a paper upon "The Pathogenic Influence of Aural Lesions in Systemic Disease." The President of the Section, Dr. Dundas Grant, delivered an address on "Some Practical Problems in Otology and Rhinology" before the American Academy of Ophthalmology and Oto-rhinology (405). At the Otological Society of the United Kingdom an important discussion upon "Fixation of the Stapes" was introduced by Dr. Urban Pritchard (240), Dr. Thomas Barr (242), Mr. Richard Lake (357), and Dr. Albert Gray in papers containing matter of great value.

A short but thoughtful paper by Dr. William Milligan (280)

¹ The numbers in the text refer to pages in the Journ. of Laryngol., Rhinol., and Otol.

on "The Influence of Pregnancy and Parturition upon Certain Forms of Progressive Deafness" touched upon a delicate aspect of the matter both from the scientific and the social point of view as brought out in the subsequent discussion. He quoted Orr's and Rows' observation that lesions of the spinal cord could be produced by the ascent of toxins, or in some cases even of organisms, from peripheral foci of inflammation either of an acute or chronic nature, similar changes having also been demonstrated to take place in cranial nerves. Dr. Milligan considered that in the same way suppuration in the middle ear might give rise to ascending lesions in the eighth nerve. Such applications of general pathology to our special department are very desirable.

Dr. Knyvett Gordon's views (275) with regard to "Scarlatinal Otitis" have important bearings on practice. He holds that in it we have an infection of the whole tract from Eustachian tube to the mastoid cells, antrum, and tympanum, accompanied by a definite osteitis where that tract is bony, and not simply a catarrhal inflammation of the lining membrane of the tympanic cavity. He has repeatedly found pus and carious bone on the mastoid side, where there has been no otorrhœa during life, in cases of death from scarlatinal septicæmia. His experience has been chiefly acquired among hospital patients of the poorer class, but it must be recognised that in all classes there is some special virulence in the otitis arising in infectious fevers, whence Dr. Knyvett Gordon's leaning towards an early resort to the radical mastoid operation in these cases.

Mr. Whitehead's reports are always among the most valuable episodes of the otological year, and three of his "Cases of Cerebellar Abscess" (63) illustrate the frequency of the extension of the inflammation from the ear to the cerebellum through the area of bone on the posterior surface of the petrous bone internal to the sigmoid sinus and external to the posterior semicircular canal. The other routes of extension are the labyrinth and the lateral sinus. This observer's habit of looking facts in the face is shown by his severe analysis of "The Symptoms present in One hundred and thirty-five Fatal Cases of Temporal Bone Disease" (269), which deserves careful study.

The subject of "Ear Affections due to Exposure to Loud Noises and to Explosions" (48) was brought before the Otological Society by Mr. Cheatle. He referred to a most interesting experiment in the paracusis Willisii made by Dr. Barr, of Glasgow. This observer found that when he blocked up his ears with india-

rubber plugs in the midst of hammering noises he was able to hear people's voices better than when he took the plugs out. This goes to confirm the constant clinical observation that it is in the obstructive forms of deafness that paracusis is present. Mr. Cheatle could suggest no treatment apart from rest, but considered that the deafness did not increase if the patient ceased to be exposed to the noise.

We have so far referred to some of the most important communications of the year, and shall, as hitherto, give what is more or less a catalogue raisonné of the chief remaining ones. This mode of compilation may be objected to from the literary point of view, but if our readers will re-peruse the otological contributions in our volume for 1906, as marshalled in this retrospect, they will find, as the compilers have done, that they will be amply rewarded for the time so spent. The numbers given are those of the pages in the volume for 1906.

Auricle.—The production of "Othernatoma in Swiss Wrestlers" is described by Dr. Valentin (401). The treatment of this condition by compression was the subject of a communication to the Belgian Society of Otology, Rhinology, and Laryngology, by Dr. Delstanche (435). Cases of Epithelioma of the Pinna are recorded by Dr. Secker Walker (348), Mr. Yearsley (137), and Dr. Dan MacKenzie (105 and 301). A case of "Cyst of the Auricle" is recorded by Dr. A. Wylie (23). An interesting case of "Angeioma" was shown by Dr. Hugh Jones (192) at the Otological Society, and a case of old-standing "Ulceration of the Lobule" by Mr. Stuart-Low (187) at the British Laryngological, Rhinological, and Otological Society.

EXTERNAL MEATUS.—At the Otological Society Dr. Bronner (99) read notes of a case of "Aspergillus Niger, with Severe Vertigo," and Mr. Lake (99) showed specimens and drawings of the same rather rare affection. Cases of "Stenosis of the Meatus" were shown by Dr. Kelson (99) and Dr. Lawrence (144), and a case of "Epithelioma of the External Meatus" by Dr. Secker Walker (347).

MEMBRANE AND OSSICLES.—A case of "Abnormality in Colour of the Membrana Tympani" (138) was shown by Mr. Yearsley, and also a specimen from a case of "Necrosis of the Malleus" (9).

CHRONIC NON-SUPPURATIVE DISEASES OF THE MIDDLE EAR.—Besides the important papers already referred to, Dr. Gray (56) records the "Pathological Conditions found post mortem in the

Case of a Person who was very Deaf." A case of "Defective Hearing from Childhood, in which great Improvement was Produced by Treatment," was shown by Dr. Secker Walker (342). Dr. W. S. Bryant (166) discusses "Obstruction of the Eustachian Tube and its Treatment." Cases of "Enlarged Eustachian Eminences" were shown by Dr. Furniss Potter (149) and Dr. Stuart-Low (186).

Acute otitis Media," is the title of a paper by Dr. Eagleton (167). A case of "Acute Suppuration, Complicated by Paralysis of the Abducens Nerve," is noted by Dr. Hastings (306) to the Belgian Society of Otology and Laryngology. Dr. Hennebert (433) contributed a study of "Labyrinthine Symptoms in the Course of Acute and Chronic Otitis." A case of "Acute Suppuration, with Prolonged Fever," is recorded by Dr. Mole (96), and a "Case which followed a Nasal Operation" by Dr. Neumann (225). Dr. Scheibe writes about the "Therapeutical Aspect of Acute Inflammations," with reference to their various etiology (307).

Chronic suppurative others Media.—This affection is regarded by Dr. Holmes (335) as "An Occasional Cause of Retro-pharyngeal Abscess in the Adult." At the Austrian Otological Society, Professor Urbantschitsch (223) showed a case in which by mistake the attichad been syringed with carbolic acid, with resulting cure.

Facial Paralysis.—Dr. Boulay (286) showed a case in which "Facial Paralysis" followed curetting of granulations and the application of solid silver nitrate. At the Austrian Otological Society, Dr. Alexander (226) showed a case in which it had followed the radical operation and removal of the labyrinth, and Dr. Neumann (225) a "Transitory Case after the Radical Operation in a Child." At the Laryngological Society of London a case of "Middle-ear Disease, with Facial Paralysis," and "Paralysis of the Velum and of the Left Recurrent Laryngeal" was shown by Dr. Paterson (230).

Mastoid diseases.—" Mastoiditis and Furunculosis" are contrasted by Dr. Delstanche (264). Dr. Henrici (401) publishes further observations on "Tuberculosis of the Mastoid in Childhood." A case of "Latent Mastoiditis" was shown by Dr. Neumann (225), a case of "Double Mastoiditis, Complicated by a Sub-occipital Abscess," was recorded by Dr. Hitz (211), and an account of "A Case Occurring without Otorrhœa" is published by Dr. Louis Bar (439).

Mastoid operation.—Dr. Heine (402) suggests "Isoform in the

After-treatment" of the radical operation. At the Parisian Society of Laryngology, Otology, and Rhinology, Dr. Luc (120) showed "Two Cases of the Radical Operation, healed in Six Weeks." At the Otological Society of the United Kingdom, Dr. Kerr-Love (94) showed "Stereograms Displaying the Steps of the Radical Operation"; and at the British Laryngological, Rhinological, and Otological Association, Mr. Nourse (189) showed "Two Cases after Operation." At the Belgian Society, Dr. Jaumenne (396) recorded a curious instance in which the operation had been performed painlessly without artificial anæsthesia in a patient with hysterical anæsthesia of the region. "Antrotomy Under Local Anæsthesia" is dealt with by Dr. Neumann (402). Mr. Stuart-Low (20) showed two cases in which the "cholesteatomatous lining had been retained" in the operation for acute mastoiditis in chronic suppuration.

Anatomy and Physiology.—At the Austrian Otological Society Dr. Frey (291) delivered a discourse upon the anatomy of the temporal bone; Dr. Grosser (289) showed models of the human embryonic skull; and Dr. Barany (361) gave an interesting lecture on "The Theory of the Function of the Semicircular Canals." Dr. Gray (142), at the Otological Society, demonstrated the anatomy of the labyrinth of the mammalia, besides making other valuable communications on similar subjects which are alluded to At the same Society also Dr. Cameron and Dr. Milligan (278) contributed an important study on the mode of continuity of the fibres of the auditory nerve with the auditory sense epithelium and with the nuclei in the hind brain. Dr Wittmaack (402) writes on the histo-pathological examination of the organ of hearing, and (364) on experimental degenerative neuritis of the auditory nerves. Dr. Shambaugh (166 and 364) has two papers in the Archives of Otology upon the blood-supply of the inner ear.

Surgical instruments and therapeutical preparations.—Very little new that is of interest has appeared during the past year. Dr. Wingrave (108) has devised an "Aseptic Syringe"; Dr. d'Ajutolo (111) a simple "Aural Masseur"; and Dr. Pollak (226) has another simple appliance for the same purpose. Dr. Pollak (226) also suggests a "Method for Carrying and Keeping Aseptic Dressings" and small instruments. Dr. Bloch (166) advises the use of "Borate of Soda" in ear cases.

The Labyrinth.—Dr. Albert Gray (365) contributes observations on "The Labyrinth of Certain Animals," having devised a method of preparation which makes the examination easier than before. He demonstrated preparations illustrating "Pathological Conditions found in the Human Labyrinth" (141). Such costly and time-robbing work in its application to the pathology of the human internal ear is of the highest value.

Dr. Shambaugh's contributions to the study of "The Blood-Supply of the Internal Ear" are well known, and the beautiful preparations he exhibited at the Toronto meeting were much appreciated (555).

The "Surgery of the Labyrinth" has received an impulse from the work of Dr. Milligan and Mr. Lake. The latter exhibited before the Otological Society (94) skulls showing the different stages of an operation for opening the vestibule. Dr. Bourguet (305) describes his own technique with a special guard to protect the facial nerve. Dr. Secker Walker (350), Professor Politzer (222), and Dr. Laurens (286) give contributions to the "Pathological Anatomy of Suppuration of the Labyrinth."

Ménière's "Symptom-Complex" was in a case of Dr. Ernest Urbantschitsch's (224) "Cured by a Gynæcological Operation." Dr. Limorata and Dr. Gavazzoni consider "Galvanism" (111) to give the best results.

The value of the tests for the "Hearing of the Highest Pitched Tones in the Diagnosis between Labyrinthine and Central Nerve-Deafness" is discussed by Dr. Dundas Grant (413). He also reviews the opinions current as to the effect of quinine on the auditory nerve (114) and its mode of action in aural vertigo (115).

Dangerous sequelæ of suppurative otitis media meningitis.—Dr. Alexander (227) and Dr. Crockett (211) report "Cases of Recovery from Meningitis," there being in the latter pus round the vessels of the brain when the dura was opened and in the former cloudy cerebro-spinal fluid (lumbar puncture) without bacteria. Dr. Knapp (306) describes a case as "Serous Meningitis," the fluid being, nevertheless, cloudy. Dr. Sloan narrates (166) the findings in a fatal case in which he dates the occurrence of meningitis from an examination with a probe.

EXTRA-DURAL ABSCESS.—Cases are reported by Dr. Secker Walker (347) and Dr. Stoddart Barr (151), there being in the latter "Paralysis of the Sixth Nerve and Double Optic Neuritis." Recoveries took place.

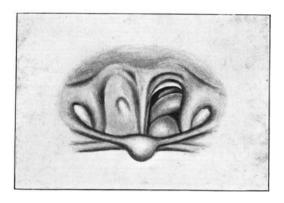
CEREBRAL AND CEREBELLAR ABSCESS.—An abscess in the left lobe of the cerebellum in a case of Dr. Neumann's (289) was "complicated with one in the Right Temporo-Sphenoidal" convolution. Dr. Secker Walker (157) narrates a singular case of a soft-walled

"Cerebral Abscess due to Acute Necrosis" of the tegmen tympani and adjacent bone. Dr. Whitehead reports "Three Cases of Cerebellar Abscess" (63), one being combined with a temporosphenoidal abscess, also one of bilateral cerebral abscess (348). Dr. Tretrôp (391) insists on the necessity of operating early upon patients with acute purulent otitis media who present a dehiscence of the postero-superior wall of the meatus and mastoid pain.

THROMBO-PHLEBITIS OF LATERAL SINUS.—"Spontaneous Cure by Obliteration of the Sinus" was found (224) post mortem in a case of Dr. Alt's. Dr. Dundas Grant (148) showed "A Case which Recovered after Operation without Ligature," and advocated a conservative attitude towards the operation of ligature (429 and He showed a case in which ligature was necessary (115), there being "Thrombo-phlebitis of the Jugular Bulb and Cerebellar Abscess," recovery resulting. Dr. Moure (431) approves of free drainage and never ligatures the jugular. The "Indications for Ligature of the Jugular Vein" formed the subject of an interesting discussion at the recent Toronto meeting of the British Medical Association. It was opened by Mr. Hugh E. Jones (498) and Dr. McKernon (507). Mr. Jones had previously narrated some interesting cases bearing on this point (193), which were discussed by the members of the Otological Society of the United Kingdom. The interest the question is now arousing is illustrated by a paper by Dr. Eagleton (in the Archives of Otology, vol. xxxv, No. 2) on "Circulatory Disturbances following Ligation of the Internal Jugular Vein in Sinus Thrombosis." These were evidenced by profuse bleeding from the mastoid wound and the immediate appearance of an optic neuritis of an intense type. Mr. Secker Walker contributes two cases, one of "Sigmoid Sinus Thrombosis with Partial Necrosis of Cochlea" (343), the other of "Septic Thrombo-phlebitis extending over nearly to the Middle Line" (351). In the former recovery took place without ligature, in the latter death followed from shock in spite of ligature. Dr. Alexander (226) narrates two cases of recovery, one with ligature and one without. A "Latent Sinus Thrombosis" occurred in a case of Dr. van den Wildenberg (436), in which pain was not relieved by the mastoid operation. Exploration of the sinus revealed the thrombosis.

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Fig. 1.



Case of Congenital unilateral atresia of the choana. (Note fold on unobstructed side.)

Fig. 2.



Fig. 3.

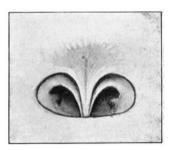


Fig. 2.—The posterior nasal opening in a dult skull. Shows second fold. (No. 35 in table.)

Fig. 3.—Posterior nasal openings in full time feetus, showing fold extending down septum and out to the middle turbinated body. (No. 8 in the table, feetal skulls.)

TO ILLUSTRATE A PAPER BY DR. W. G. PORTER, "ON A FOLD SOMETIMES TO BE FOUND IN FRONT OF THE POSTERIOR NASAL OPENING."

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