Medical Memoranda

Morbid Anatomy of Chronic Otitis Media

It is interesting to try to envisage the morbid anatomy of the temporal bones from the clinical data, radiographs, and other diagnostic aids. The more obvious abnormalities may prove mere palimpsests in the light of what is found at operation. The following 3 unilateral cases were among those chosen for conservative operation by the transmeatal route, with a view to providing better drainage and access for treatment.

Case 1.—The patient, aged 25, had been sent home from Gibraltar owing to otitis of ten years' standing. A small polypus protruded through an oblique perforation. Radiographs showed that pneumatization on the left side had been arrested in infancy (Figs. 1 and 2). At operation in November, 1941, a large infected cavity in the region of the mastoid antrum was evacuated; the rest of the bone was compact. The meatus was narrowed by osteophytes. At the end of December healing was in an advanced stage.

Case 2.—A sergeant aged 42 had been sent home from Iceland with a view to surgical treatment. He had had a perforation in Shrapnell's membrane for 15 years. At operation in August,

FIG. 1.—Case 1. Normal right side.
FIG. 2.—Case 1. Chronic empyema of left mastoid antrum.
FIG. 3.—Case 2. Cholesteatoma in attic.
FIG. 4.—Case 3. Retention cyst below knee of lateral sinus.

1941, a well-pneumatized temporal bone was found to have been invaded by a small cholesteatoma resembling a chamois-leather pocket, with foul green contents (Fig. 3). Within 8 weeks the ear was dry and healed and the hearing had much improved.

Case 3.—A man aged 35 had had otorrhoea for 30 years. There was an antero-inferior perforation, but with a probe a fissure was also detected in the posterior quadrant. An operation was performed in January, 1941. Within the cells at the tip of the mastoid, which were isolated by a prominent genu of the lateral sinus, was encysted fluid (Fig. 4). Suspended in the fluid were scintillating crystals (rectangular, with a corner missing) of cholesterol. The walls were of burnished bone, any lining membrane being invisible. The patient was subsequently passed A1 for the R.A.F. military police.

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J. M. Brookhart, F. L. Dey, and S. W. Ranson (*Endocrinology*, 1941, 28, 561) observe that there is direct evidence for believing that the site of the erogonic action of the gonadal hormones is in the central nervous system. In experimental work on guinea-pigs they found that animals with lesions in the anterior part of the hypothalamus fail to show pro-oestral or oestral behaviour, and that such behaviour cannot be induced in them by the injection of ovarian hormones alone or in combination with pituitary hormones.

Reviews

IMMUNOLOGY OF PARASITIC INFECTIONS

Immunity against Animal Parasites. By James T. Culbertson, Assistant Professor of Bacteriology, College of Physicians and Surgeons, Columbia University. (Pp. 274. 36s. 6d.) New York: Columbia University Press; London: Oxford University Press.

Thirteen years have elapsed since the publication of Prof. Taliaferro's book entitled *The Immunology of Parasitic Infections*. The present volume of similar title may be regarded as a continuation of the first. In fact the author states in his introduction that he has taken Taliaferro's book as its point of departure, so much so that very few of the references quoted in the present volume antedate 1929. There is no doubt that Taliaferro's book, which collected in an authoritative manner a vast amount of scattered information on the subject of immunity to animal parasites, was followed by a great extension of researches in this field. It is chiefly with the results of these later investigations that the present volume deals.

The book is divided into three parts. Part I discusses natural resistance and acquired immunity and the general principles underlying these phenomena. Part II is devoted to the immunity to specific diseases, the most important of which is malaria. Part III considers applied immunity, the relation of immunological to morphological classification of parasites, and serological methods of diagnosis of infections.

Those who have followed the literature of the past ten or fifteen years will be well acquainted with the extent of that devoted to the immunological aspects of animal infections. Formerly the study of parasites was almost entirely morphological, but of late years these have given place very largely to immunological investigations, and it is with these that the author of this book deals so successfully that it is difficult to find fault with anything he has written. He has certainly given a most valuable review of the modern position of his subject, and immunologists and parasitologists alike will find Culbertson's *Immunity against Animal Parasites* an indispensable aid to their studies and future investigations.

ASPECTS OF GENETICS

New Paths in Genetics. By J. B. S. Haldane, F.R.S., Weldon Professor of Biometry in London University. (Pp. 206. 7s. 6d. net.) London: George Allen and Unwin. 1942.

Books that comprise a series of special lectures can seldom possess, unless very extensively rewritten, the characteristics of textbooks or monographs. They have more the nature of a commentary, choosing for particular attention those aspects of the subject which have interested the author and to which he has devoted his own researches. Prof. J. B. S. Haldane's book is based on lectures delivered in Holland in March, 1940. The preface shows that he seems to feel that some apology is now needed for confining the published account to certain aspects of genetics, for a relative dearth of references, and for dealing so largely with the work of himself and his associates. It is clear that the lectures have been prepared for publication under conditions of considerable strain. He says that he hurried to get them into book form, but that meanwhile "I was called upon to undertake researches for the British Government designed to save the lives of certain members of its armed Forces. This research not only occupied most of my time, but left me in a state of fairly extreme physical exhaustion, for the conditions which I was investigating were of such a character as to cause loss of consciousness and other serious symptoms." He also states: "I do not even know whether I shall enjoy life and liberty long enough to correct the proofs." Actually, few if any readers will feel that any apology is necessary and all will enjoy these fascinating essays on selected topics in the spirit in which they were no doubt welcomed as lectures.

After a general survey a detailed analysis is given of certain biochemical researches, notably those concerning the development of colours in flowers. The next essay deals with genetics and development and is based on Gruneberg's interesting analyses of the manifold and complex effects of certain genes in the mouse. The remainder of this small volume, nearly half in fact, is devoted to human genetics. In this field recent contributions from this country have been substantial and