ABSTRACTS

MEDICAL OPHTHALMOLOGY

(1) **Smelser, G. K. (New York).—The rôle of the cervical sympathetic ganglion and Müller's orbital muscle in experimental exophthalmos.** *Amer. Jl. Ophthal.*, Vol. XX, p. 1201, 1939.

(1) **Smelser's** animal experiments inducing exophthalmos by the injection of extract of pituitary gland (thyrotropic hormone) have revealed the following facts. That all the orbital contents except the ventral lacrymal gland increased in weight. The orbital fat hypertrophied and this and the connective tissues and extra-ocular muscles became oedematous and infiltrated with lymphocytes. Of all the orbital tissues the fat and connective tissue underwent the greatest relative increase in volume and weight. Exophthalmos persisted post-mortem and the changes in the orbital tissues and in the degree of exophthalmos were quite unaffected by removal of the cervical sympathetic ganglia and the excision of Müller's unstriped muscle tissue. It is evident from Smelser's experiments that the active constituent of the pituitary extract (thyrotropic hormone) does not act through the cervical sympathetic, nor on the sympathetic receptor substance nor on the smooth-muscle cells.

Orbital decompression in these experiments did not relieve the condition of the orbital tissues but slightly decreased the degree of exophthalmos.

H. B. STALLARD.

(2) **Meyer, S. J.** and **Okner, H. B. (Chicago).—Dysostosis multiplex with special reference to ocular findings.** *Amer. Jl. Ophthal.*, Vol. XXII, p. 713, 1939.

(2) **Meyer** and **Okner** describe the case of a female child, aged 7 years, suffering from dysostosis multiplex. Among the more obvious skeletal deformities were the following. A broad, saddle nose, poor dentition (16 teeth in all had erupted), a shortened cervical spine which gave the appearance of the head resting directly on the shoulders, curvature of the spine, flaring and blunting of the distal ends of the clavicles and ribs, impaired flexion and stiffness of the fingers, genu valgum, a duck-waddling gait, congenital heart disease, impaired hearing, and a prominent abdomen. The general appearance of the child suggested both cretinism and achondroplasia. Her intelligence was apparently not below normal. Radiographs of the skull showed an increase in the antero-posterior and the lateral measurements of the sella

turcica, and a foamy trabeculated appearance of the short broad phalanges of the metacarpals and metatarsals.

At the age of 3 years vision was said to be defective after mumps. When the authors examined the child at the age of 7 the right vision was counting fingers at 6 feet and left vision was perception of light. The cornea was so hazy that details of the iris, pupil and anterior lens capsule could not be made out. The corneal diameter was 14 mm. and the authors comment that megalocornea had not been mentioned hitherto in the literature about dysostosis multiplex. There was no evidence of congenital hydrophthalmos.

Slit-lamp examination showed that the superficial layers of the cornea were flat and regular. Bowman's membrane and the substantia propria showed many punctate greyish white opacities; some of these had coalesced into small threads and plexiform masses.

H. B. STALLARD.

(3) **Nastri (Rome)** and **Basile (Naples).—A rare case of primary tumour of the optic papilla. (Su di un raro caso di tumore primario della papilla ottica).** *Boll. d'Ocul.*, Oct. 1939.

(3) **Nastri** and **Basile** give the history of a very unusual case; the subject, a man aged 47 years, on October 9, 1930, suffered a blow on the right supraciliary region, which made him lose consciousness. He noted some days after that he could not aim satisfactorily with the right eye, and sought advice; it was noted that there was a mass about a disc and a half in diameter on the temporal side of the disc and covering the outer third. There was slight oedema of the macular region. V=5/7·5. He came again in September of the next year; the mass had increased in size and covered the disc. V=5/5. A year later the mass was still larger and the retina had become detached. V=1/20. In view of the probable nature of the mass, excision was advised but was not accepted by the patient, until in 1935, he suffered from secondary glaucoma, with much pain. Examination of the excised eye showed a rounded mass springing from the disc and protruding into the vitreous; the retina was entirely detached; the mass was made up almost entirely of new capillaries; in some sections a large vessel was seen which extended back into the nerve, this seemed to be connected with the main central artery. A number of cells were seen to be full of vesicles; these had been probably full of fat, and are in nature similar to those called "pseudoxanthomatous."

The authors think that the accident could not have been the start of the tumour from its slow growth subsequently but that it must have been present for some time previous. They call attention to the slight malignancy of tumours in this place, and to the

" pseudoxanthomatous " cells—which spring from the endothelial cells of the vessels.

HAROLD GRIMSDALE.

(4) **Kenel, Ch. (La Chaux-de-Fonds).—Five cases of opto-chiasmic arachnoiditis of traumatic origin—four confirmed by operation. (Cinq cas d'Arachnoidite optico-chiasmatique d'origine traumatique, dont quatre confirmés opératiorement).** *Ophthalmologica*, Vol. XCVI, p. 336, 1939.

(4) **Kenel** discusses four cases of cranial injury with such general disturbances as headaches, dizziness, insomnia, physical and mental weakness and eye troubles: slight decrease of visual acuity, pronounced diminution of the field of vision in both eyes, increased tension in the retinal arteries, but no fundus lesions. The diagnosis of opto-chiasmic arachnoiditis was confirmed in four cases by operation which produced improvement especially in the field of vision. In a fifth case, no operation was done and vision deteriorated progressively.

ARNOLD SORSBY.

(5) **Walsh, Frank B. (Baltimore).—Ocular importance of sarcoid. Its relation to uveoparotid fever.** *Arch. of Ophthal.*, March, 1939.

(5) **Walsh's** paper contains in its early part six short histories of patients suffering from various forms of sarcoid, which go to show their multiplicity. Case 1 was a woman, aged 56, with lumps in the eyelids, and a mass in the subconjunctival tissue over the right internal rectus. This was excised and found to consist of masses of epithelioid cells and giant cells with surrounding lymphocytic infiltration. There was no caseation and no bacilli were found. The lumps disappeared in two and a half months. Case 2 was a negress, aged 38, with widespread sarcoidosis affecting the skin, liver and spleen, and also producing bilateral swelling of the lacrymal glands. She had a positive Wassermann reaction. Case 3 was a negress, aged 26 years, who developed bilateral low grade uveitis and fever in association with swelling and scab-like lesions of the arms and legs. Transient palsies of the vocal cords occurred. The Wassermann reaction was negative.

Case 4 with a positive Wassermann developed bilateral intra-ocular inflammation, with tumours of the lids and general glandular enlargement. Biopsy of one of them showed changes characteristic of sarcoid.

Case 5, a negro boy aged 14 years, started with bilateral painless swelling of the parotids and changes suggestive of Hodgkin's disease. Diagnosis was aided by radiograms of the bones which showed the changes characteristic of sarcoid.

Case 6, a woman aged 34 years, presented changes in the uveal tract and central nervous system in addition to skin lesions. In another case, reported from the literature, there developed bilateral papilloedema, which in one eye went on to optic atrophy, while in the other, a small mass was observed to be in front of the disc. Autopsy showed masses of epithelioid cells involving the optic nerves, chiasma, cerebral peduncles and left temporal lobe.

From these and other case reports, it appears that uveo-parotid fever and sarcoid may be different manifestations of the same fundamental disease. The nature of this has not yet been conclusively demonstrated, but arguments in favour of a tuberculous aetiology are (1) the occurrence of tuberculous lesions elsewhere in the body; (2) the histological characters of the lesions; (3) the transformation into classical tuberculous lesions that sometimes occurs; (4) the disappearance or alleviation of sarcoid lesions when this happens. It is probable that for sarcoid to develop, the tubercle bacilli must be few in number, and of low virulence in a host who is only slightly allergic and has a high resistance. Another possibility is that the lesions are of spirochaetal origin. Three of the six cases reported by the author had positive Wassermann reactions.

F.A.W.-N.

CORRESPONDENCE

DEMANDS OF THE SERVICES

To the Editors of THE BRITISH JOURNAL OF OPHTHALMOLOGY.

DEAR SIRS,—The letter in your December issue on the demands of the Services asks for an obvious reply.

Mr. Rugg-Gunn's argument appears to be that the mass of ophthalmic work in the Army is refractions, that the energies of Ophthalmologists are being "deflected from their proper sphere of ministering to the need of the civilian community" and that Service refractions should be done by sight-testing opticians under medical control.

Assuming that his argument applies to the Army at Home only, the following observations appear relevant:—

1. The bulk of Army work to-day in this country certainly does consist of refractions—but so does the bulk of civilian work, certainly over 80 per cent. This, however (so far as the Army is concerned) applies only to conditions of "peace," but other contingencies have to be catered for.