if it was considered essential to examine the visual fields in all cases of failing vision for which no local causes can be found.

Dr. F. A. Pickworth showed a large number of slides illustrating the relationship of infection in the sphenoidal sinus to disorders of the pituitary gland and adjacent brain substance, in the subjects of mental disorder. His thesis was that the relationship of post-nasal sepsis to disorders of the pituitary gland had been somewhat neglected, and that a large number of patients in mental hospitals showed symptoms of endocrine dysfunction, which could be correlated by histological methods, with involvement of the pituitary gland by the sphenoidal sinus infections also common in such patients.

Mr. T. C. Graves said that the occurrence of endocrine disturbances in patients suffering from mental disorders was a generally accepted fact, but these disturbances were so complex, so variable and so often overshadowed by the mental symptoms, that they might not be adequately recognized. This was especially the case in pituitary disease, the symptoms of which were indefinite—varying, as they did, according to the extent of disturbance of function of adjacent nervous tissue.

Certain symptoms, however, frequently seen in the subjects of mental disorder, appeared to have a direct relationship to pituitary function. These were: (1) General loss of muscle tone; (2) disturbance of the peripheral circulation, causing extreme facial pallor and cyanosis of dependent parts; (3) disturbance of nutrition, emaciation which might be followed by obesity; (4) disturbances of the reproductive mechanism (e.g. amenorrhea).

Several other symptoms were of value as indirect evidence of pituitary disease since they were referable to that part of the brain adjacent to the pituitary stalk. For instance, absence of pyrexial response to the injection of substances which produced a high temperature in normal persons. In these cases the usual increase in pulse-rate occurred, as in normal individuals.

[Mr. Graves recorded in detail two cases illustrating these observations.]

Dr. Adie (in reply) said he had no criticism to offer on Mr. Dott’s perfect demonstration, but he did not like the expression “cranio-pharyngioma,” and he did not think putting the suffix “oma” on to the situation in which a tumour grew was a very good practice, e.g., meningioma.

He wished that he had Professor Dodds to work on the cases at Queen Square Hospital. Those engaged in that hospital would now work more closely with the biochemist.

Mr. Cairns had done much good service in pointing out that not all fat boys were suffering from pituitary tumour. If a fat boy with small genitalia presented himself in the out-patient department and the students were asked to diagnose the condition they at once said “pituitary tumour.” Fortunately, in most cases that diagnosis was not correct.

He agreed that some gauge was required to measure the increase or reduction in the size of patients’ hands, and suggested that the wedding ring, or a graduated series of rings, might be a good guide.

Cases shown at the Clinical Meeting held at the London Hospital, E.1, November 26, 1929.

Pituitary Tumour.—R. A. Rowlands, M.D., and S. Levy Simpson, M.R.C.P. —Patient, male, aged 35, admitted to hospital October 20, 1929. Quite well until eight years ago (1920), then had pneumonia and pleurisy. He recovered without obvious complications, but has never been well since. Has frequent colds and influenza and feels languid and weak. Feels the cold intensely in spite of much
additional clothing. Hands and feet often cold and numb. Skin has become smooth and dry, and the skin of the legs exfoliates, fine scales falling out of his garments to the floor. Sometimes experiences sensation of "hot sweats," followed by cold shivers, giddiness and blurred vision, but has never become unconscious. Apart from these attacks, his vision has not troubled him. Headaches not a prominent symptom, but occur sometimes as severe ache across frontal region, and on vertex; not associated with nausea or vomiting. Occasionally sensation of "hot sweats" is limited to head. Facial hair does not grow so quickly as formerly. Patient now shaves only once a week instead of daily; has noticed loss of pubic and axillary hair. His face has become much paler and he believes that his general appearance has changed.

Patient is not impotent, but during the last few years no emission has ever taken place. He believes his genitals have decreased in size. Sphincters not impaired.

Case of pituitary tumour (Dr. R. A. Rowlands and Dr. S. Levy Simpson).

No increase in weight. Patient is fairly well nourished, but there is no marked adiposity.

The facial appearance is suggestive of a myxoedematous condition. Skin thick, dry and pallid. Hardly any hair present over face. Pubic hair also scanty and of feminine distribution; axillary hair almost absent. Fingers rather long and tapering towards the extremities. Genital organs smaller than the average. Hands are cold to touch and bodily temperature is persistently subnormal (97° F.). Respiration does not exceed 20. Pulse about 66. Mental condition normal.

Visual fields, to rough test and as measured by the perimeter, are quite full. Right disc normal; left, pale with a deep physiological cup. No gross impairment of vision.

Blood-count (October 20 1929), showed nothing abnormal, except a slight relative lymphocytosis.

Erythrocytes 5,000,000, hæmoglobin 72%, colour-index 0·72. Leucocytes 6,640 (Differential count: Polymorphonuclear neutrophils 51%, small lymphocytes 38%, large lymphocytes 7%, large hyaline 3%, coarsely granular basophils 1%).

While in hospital there was a slight transient glycosuria.

Carbohydrate tolerance tests gave a curve which approximated to the "lag-type," but there was no resulting glycosuria.

10.30 a.m., fasting level, 0·062%; 1.15 a.m., blood sugar, 0·207%; 12.30 p.m., blood sugar, 0·077%.

Skiagram of skull shows enlargement of the pituitary fossa. The floor of the fossa appears to dip into the sphenoid sinus. The posterior clinoid processes are long and eroded. The radiological finding agrees with the diagnosis of pituitary tumour.

Comment.—The tumour is probably a chromophobe adenoma of the anterior pituitary. Headaches are not very severe or persistent in this particular case, but recently there have been attacks of pain referred to the first division of the fifth nerve on the left side. This sometimes occurs with pituitary tumours, owing to pressure on the fifth nerve or one of its branches. The fields of vision are normal, and the fundi are almost normal, there being very slight pallor of the left disc. In view of these findings and the state of hypopituitarism, it might be advisable to postpone operative interference.

Chronic Lymphatic Leukæmia with Aleukæmic Phase. — R. A. ROWLANDS, M.D., and S. LEVY SIMPSON, M.R.C.P.: With a Note on Lymphosarcoma, by H. M. TURNBULL, D.M.—Patient, female, aged 59, married, first came to the out-patient department on January 10, 1928, complaining of "glands in the neck," dyspnœa on exertion and general lassitude. Patient had had one child who had died from pneumonia. No history of miscarriages or stillbirths. Apart from rheumatic fever when aged 17, and vague transitory paresis of the right hand, had been comparatively well until early in 1927, when she had a slight sore throat, and noticed swollen glands on both sides of neck. Some months later had dyspnœa on exertion and general lassitude.

Condition when first seen.—Several enlarged glands were present in the anterior and posterior triangles of the neck on both sides, and some smaller glands in both axillæ and groins. No evidence at that time of enlargement of spleen or liver. A few dilated veins on the chest. Lungs normal; no evidence of pressure on bronchi. No hæmorrhagic murmurs in the heart. Blood-pressure 120/80; arteries showed no abnormality. Central nervous system normal. No pallor of mucous membranes. The blood-count at that time was: Erythrocytes 4,700,000, hæmoglobin 70%, colour-index 0·74, leucocytes 8,200. Differential count showed 46% polymorphonuclear neutrophils, 4% eosinophils, 46% small lymphocytes, 2% large lymphocytes, 2% large hyaline cells.

The patient was at that time unwilling to come into hospital for biopsy of a gland, and a tentative diagnosis of chronic lymphatic aleukæmic leukæmia was made.

<table>
<thead>
<tr>
<th>Month</th>
<th>Total leucocytes</th>
<th>Small lymphocytes</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>6,200</td>
<td>37%</td>
</tr>
<tr>
<td>July</td>
<td>8,340</td>
<td>60%</td>
</tr>
<tr>
<td>October</td>
<td>10,680</td>
<td>52%</td>
</tr>
</tbody>
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There was then apparently a period of non-attendance. On May 14, 1929, total leucocytes had increased to 34,000, small lymphocytes being 51%. The glands in the meantime had increased considerably in size, and the patient consented to