Balfour, D. C. CANCER OF THYROID. [Med. Rec., Nov. 16, 1918. J. A. M. A.]

One hundred and three cases of cancer of the thyroid were seen in the Mayo Clinic, a percentage of 1.6 of 6,359 cases of goiter, exclusive of the exophthalmic group. The cancer incidence, based on 14,456 patients with goiters, is 1.19 per cent. Of the 103 patients, 81.5 per cent. were more than 40 years old. Sixty-eight (68 per cent.) of the patients were females, thirty-five (35 per cent.) were males. The most important lesson to be drawn from an analysis of these cases, Balfour says, is the fact that in 46 per cent. no clinical manifestations of the disease were in evidence. This group shows by far the highest percentage (about 70) of patients free from recurrence at the present time. In other words, the great majority of apparent cures have occurred in those cases in which the malignant change was an unexpected finding. Total thyroidectomy was rarely performed in this group. In most instances the lobe containing the tumor and the malignant process was removed, but in many the enucleation of an adenoma was the procedure. The analysis showed also that when clinical evidences of cancer are present the results of surgical treatment are discouraging. Total extirpation of the gland appears to be indicated only when both lobes are grossly involved in the disease, and when past experience warrants surgical interference in the particular case. Recognizable involvement of cervical glands usually means that the time for surgical cure is past. Occasionally, however, just as the unexpected occurs in the treatment of extensive cancer elsewhere, an apparent cure is obtained. Gross involvement of trachea or esophagus is almost a certain sign against curability. In this series the average number of years of abnormal growth in the thyroid preceding the operation was 11.6. This Balfour regards as being proof positive of the advisability of the early removal of well-developed thyroid nodules.

Barker, L. F. EXOPHTHALMIC GOITER. [J. A. M. A., Aug. 3, 1918.]

Barker says that intimate interrelationship of the endocrine glands and the nervous system is nowhere better illustrated than in the symptomatology of exophthalmic goiter. While it is generally agreed that exophthalmic goiter is a thyroid intoxication it is not surprising that it is still described as a nervous disease. Of the four cardinal symptoms of exophthalmic goiter—tachycardia, struma, tremor, and protrusion of the eyeballs—no less than three of them are due to abnormal innervations and there are hosts of minor symptoms in which neuropathic and psychopathic phenomena predominate. At present any study of the symptoms must take in metabolism and an extensive inquiry into the domain of nervous pathology. The author gives quite a list of symptoms directly referable to disturbances of the vegetative nervous system in which the larger number of pathologic-physiologic phenomena occur and he says that this

is long enough and familiar enough to us to show at once the prevalence of autonomic symptoms and signs. Though one or several of these may appear simultaneously they are never all present in the same case at once. Many of them are the opposite of each other, indicating the double innervation that exists in the autonomic system which makes some of them reciprocally antagonistic. Certain stimuli we know will pick out one set of fibers and leave the other set unaffected and different individuals may be specially liable to troubles of one or the other. Very peculiar conditions are sometimes met with owing to this and other facts. The author enumerates the phenomena referable to the peripheral neurons of the cerebrospinal nervous system. What has surprised him most in the study of the patients exhibiting exophthalmic goiter, as far as the peripheral nerves are concerned, has been the constant presence of extensive evidence of disturbed function of the peripheral autonomic nerves in contrast with the apparent absence of evidence (except in rare instances) of disturbance of function of the peripheral cerebrospinal nerves. None of the grosser organic lesions of the brain and spinal cord sometimes met with in the course of exophthalmic goiter seems to stand in any relation of effect to the thyrotoxic cause. The evidence for an epilepsy of thyrotoxic origin is still too incomplete, and the characteristic fine tremor is doubtless cerebral in origin, but we cannot explain it pathogenically any more than we can account for other pathologic tremors. The neurotic and psychotic symptoms are most interesting. The neurasthenic and anxiety states, the phobias and obsessions are notorious, and outspoken psychoses are not at all uncommon, especially when there is a hereditary taint. The behavior of the patient is more or less abnormal and it seems to Barker as if the fundamental instinctive mechanisms are often functioning abnormally. How far the nervous symptoms and especially the pathologic emotivity depend on the direct intoxication of the brain, and how indirect effects on the higher nervous apparatus through an intoxication of the vegetative nervous system or of all the body cells concerned in metabolism are brought about is yet unknown to us. He is personally inclined to lay more and more stress on injury to the lower and more primitive mechanisms.

Watson, L. F. GOITER IN PREGNANCY. [J. A. M. A., Sept. 14, 1918.]

Exophthalmic goiter in pregnancy is rare, owing to the restraining influence the disease exerts on conception. He believes that cases of goiter that have not lasted long cause the patients to ascribe their symptoms at pregnancy to that condition, while in reality they are due to a beginning hyperthyroidism. One of the best means we have of furthering the study of this obscure subject is by reporting and discussing the few cases we see. The author reviews some of the work that has been done in the way of animal experiments, and says that it is the opinion