

found normal, or but little affected. I can only recall an autopsy upon a patient of Dr. J. Stewart at the Royal Victoria Hospital, in which I found a large cancerous tumour of the pituitary. Here there had been a myxœdematous swelling of the hands, and of other regions to less extent, without bony overgrowth, and no change was found in the thyroid. The condition, however, was not sufficiently advanced to deter Dr. Stewart from diagnosing tumour of the hypophysis. A somewhat parallel case (of apparent atrophy of the pituitary), in which the symptoms of myxœdema were more marked, is recorded by Codd (18), but the anatomical details are given very briefly. Similarly we possess no exact records of atrophic disease of the glands unassociated with myxœdema. I can only point out that it is not uncommon in the aged who show no signs that can properly be regarded as myxœdematous—unless senility itself be regarded as such—to find a condition of very extensive chronic interstitial thyroiditis (as it may be termed) with arterio-sclerosis, calcification and hyaline changes, with retrograde or pseudo-embryonic type of vesicles. I have come across more than one case of this nature. There can be no doubt that here the secretory activity of the gland tissue must be very greatly reduced. If, however, we turn to cases in which by surgical means the equivalent of complete atrophy, namely, complete thyroidectomy, has been attained, we then possess abundant evidence that the thyroid proper may be absent without myxœdema necessarily intervening, and almost as abundant evidence from the more recent researches that the absence of symptoms is connected with vicarious activity on the part of other organs, and especially of the parathyroids. These may be regarded either as true accessory thyroid tissue, or as distinct organs, according to the point of view of the individual. Certainly when the thyroid is functional they do not acquire the full characters of thyroid tissue, but similarly there are often within the healthy organ scattered areas of embryonal tissue. This can be said with precision, that they are independent masses of tissue, apparently most closely related to the thyroid, which are at times capable of development to, or towards, the adult type of the gland, and of assuming vicarious functions. In like manner the pituitary body can at times undergo very definite compensatory enlargement. This was first demonstrated experimentally by Rogowitsch (19), while Boyce and Beadles more especially have added to our knowledge of its enlargement in cases of myxœdema, cretinism and cachexia thyreopriva.

An interesting point in this connection, to which attention has been drawn by Rogowitsch, is that the rabbit, from which the thyroid can