

of Graves' disease is something apart from the essential cause of ordinary goitre, and that Graves' in itself primarily depends upon some nervous or other stimulus acting upon the thyroid gland and leading to increased activity and increased secretion. The sudden liberation of some of the retained secretion is best calculated to explain the paroxysmal disturbance of the "Graves'" type often met with in the course of ordinary simple goitre, as again does sudden increased discharge or absorption explain the disturbances seen in the course of Graves' disease itself, as well as the dangerous and sometimes fatal results following the operative handling of the diseased gland.

In the course of this short address I am unable fully to discuss the extraordinary variation which we come across in the histology of the goitrous thyroid—the degenerative and interstitial changes, the development of cysts (which in my laboratory at Montreal has been more especially studied by Dr. Bradley,*) the apparent and at times real hyperplasia of the gland, or again the development of actual malignant growth, whether carcinomatous or sarcomatous.

Nor again have I time to take up the vascular forms of goitre to which Virchow was the first to call prominent attention. These essentially vascular forms I have not come across; I have only noticed that in ordinary goitre there may be accompanying great vascularity. I can only suggest that the remarkable dilatation and enlargement of the arteries in the thyroid which Virchow so frequently met with, may in itself be an evidence of the obstruction to the perifollicular circulation brought about by the distention of the follicles. With regard to the cystic formation so frequently met with, I would point out that cysts in the thyroid having fluid contents are always of degenerative nature, and in the majority of cases follow localised hæmorrhage; as such they do not in themselves induce any of the generalised disturbances above mentioned, at most they cause pressure symptoms. This has been very clearly pointed out by Dr. Shepherd.

Despite all the work that has been done of late years, the very multiplicity of the changes which occur makes it impossible to enter into a discussion as to the relative frequency of occurrence, and again as to the meaning of these various changes, nor again are we prepared to comprehend all of them. This much, however, may be said, that by far the commonest, in fact the common type, of ordinary goitre, is the colloid or parenchymatous. This form indeed must be taken as the type, and taking this as type, we can, if we regard it as essentially the result of obstruction and retention, gain some comprehension of the symptomatology of the condition.

* Journal of Experimental Medicine, Vol. I., p. 401.