

remark would apply to all the other ductless glands—the adrenals, the thymus, the pituitary body and the accessory thyroids. We have learned, however, that there is a close relationship between all these ductless glands. Thus, for instance, the pigmentation in Addison's disease of the adrenals is sometimes simulated by the pigmentation of exophthalmic goitre. In acromegaly, now believed to be due to a lesion of the pituitary body, we have a condition which is not at all unlike the condition found in athyrea or myxedema. Again, the persistence of the thymus gland in many cases of exophthalmic goitre, and likewise in a number of cases of acromegaly has been noted by different observers. Our attention might also be directed to the point that as the thymus gland atrophies the thyroid often enlarges. This also we have learned, that the thyroid secretion exerts a profound impression over metabolism. Thus, for instance, the excessive secretion of the thyroid juice or the excessive elimination of this juice from the gland during operations gives us a condition characterized by a tachycardia, by mental excitement, by extremely rapid respirations, profuse sweating, and many other evidences of profound change in the metabolism of the body tissues. On the other hand the condition of the thyroid gland in which there is a diminished secretion of the thyroid juice or an absence of it, gives us that condition that we call myxedema, in which the metabolic functions of the body are wonderfully lessened; where, for instance, the pulse is slow, the mental functions are sluggish, the skin is dry and scaly, the frequency of the respiration is lowered, and the general condition is one of lowered vitality or decreased metabolism.

We cannot discuss the other ductless glands to-day, but must confine ourselves to a study of the thyroid gland alone.

Let me call your attention to an interesting point, and a point which to me is of considerable importance in the study of this gland. It has been computed, and justly, that the blood supply to this gland is greater than the blood supply to the brain; arguing thus for the importance of this organ in the human economy. Now just how this gland utilizes this immense blood supply, and just how the vital chemistry goes on in the interior of the organ, so that the blood emanating from the organ is potent for good or evil, depending upon the quality of the thyroid secretion, we do not know. This, however, we do know, that in some way some constituent of the blood taken from this large blood supply is utilized in the vital chemical laboratory of the organ, is there transformed into an agent all