

ness, vasomotor disturbance, perspirations, increased metabolism. Most of these symptoms can be induced in the healthy animal by the administration of liberal doses of thyroid gland extract. In this condition there is loss of weight, because metabolism break-down is more rapid than the up-building of tissues. This is just the reverse to what happens in myxædema, where the wasting is due to faulty digestion and assimilation.

Many theories have been advanced on the question of how the thyroid gland acts. Some have claimed that its action is due to some substance produced in the gland acting as an antidote to some toxin. In support of this theory the fact that the gland contains iodine has been urged. This theory breaks down, however, and does not meet all the requirements. That there is an internal secretion in the gland is made clear by the results obtained by feeding it to animals. This also proves the power of the gland to store up within itself its own active secretion.

There is no domain where there is a richer field for the physiologist than the tracing of the influence of the ductless glands upon each other. It is known that the thyroid has close relationships with the supra-renal bodies. It is also known that when the thyroid is removed the pituitary enlarges. Then, again, the early removal of the thyroid leads to imperfect sex development. Further, the thyroid is more active at menstrual periods and during pregnancy than at other times, and exophthalmic goitre is much more frequent among women than among men.

In the treatment of hypothyroid conditions, as laid down by E. Hertoghe, care should be taken not to begin with too large doses, which would have the effect of too rapidly removing the fat, mucin and other waste products in the body. If too large doses of the thyroid be given the patient is liable to suffer a great deal from muscular and joint pains, and the heart may show signs of disturbance of quite an alarming nature. Indeed, so far as the heart is concerned, there may be induced all the symptoms of hyperthyroidism. Too large doses may cause such a rapid combustion of material in the body that a condition of fever may ensue. The weight of the patient should be reduced very gradually, not more than 3 to 5 ounces a day. For this purpose three daily doses of 5 grains each are usually ample.

As one is dealing with a lost gland function, the treatment can only be regarded as palliative, and must be continued for a long time, perhaps for the remainder of the patient's lifetime. The other functions of the body must be regulated. Any form of diet may be allowed, with a limit on the supply of sugar and starch. Alcohol in all forms must be prohibited. Cold baths must be interdicted strictly, and all