

nervous system, meaning thereby the co-ordination centre of the vasomotor and cranial nerves.

The thyroid too, as well as the thymus, is relatively a temporary gland and degenerates with age. The severity of the symptoms following the removal of the thyroid varies inversely as the age of the subject. The immunity from post-operative myxedema has been variously placed between the age of 30 and 46. The action of this gland has proved a veritable will-o'-the-wisp in investigation. The employment of the extract of this gland in myxedema and its marvellous action was indeed a revelation of the possibilities of organotherapy. This condition of myxedema and criticism was, therefore, regarded as a diminished activity of the thyroid, thus lowering the oxidation processes. Over-activity of the thyroid, on the other hand, by surcharging the blood with this organ's internal secretion will over-stimulate the pituitary, and through it the adrenals, which thereby causes hyperoxidation, the symptom complex of exophthalmic goitre. This theory seemed to bring the explanation of thyroid phenomena within easy grasp, when the removal of these glands in different animals produced such a diversity of results that fresh questions were raised.

Why did removal of the gland in a carnivorous animal result in immediate death? Why did removal of glands in omnivora produce symptoms similar to myxedema in man, and only after a long interval—death? Why was removal in herbivora attended with comparatively insignificant results?

By the discovery of small structures associated with the thyroids and called parathyroid bodies, and so minute as to escape earlier attention, the previous theories vanished, and in the darkness that followed the explanation seemed as distant as ever.

It would now appear that the parathyroids themselves are responsible for the train of symptoms attributed to the removal of the thyroids. If the parathyroids of carnivora are dissected out and the thyroid left intact, the tremors, convulsions, etc., at once follow, while conversely no such symptoms develop if the thyroid is excised while the parathyroids are left. In spite of the diversity of views held regarding the parathyroids there seems to be a consensus of opinion that the gland has an internal secretion which neutralizes a toxic product in the blood. This product produces marked irritation of the muscular and nervous system manifest by tetanus and epileptiform convulsions.

Sajous considers that it is the oxidation factor that prevents the accumulation of the spasmogenic elements.