

in a few days one notices the symptoms of overaction, *i.e.*, tremors which may grow into more or less tetanoid spasms, reminding the physician of a case of tetany.

These are followed by, and, to some extent, replaced by, diminished voluntary motor power or paralysis.

Very early in the history of the case the animal walks stiffly, and later he may, from pure paralysis, as well as general weakness owing to lowered vitality, walk very feebly, or not at all.

Generally progressive and rapid emaciation is well marked in the carnivora; though after complete extirpation in man this is not always pronounced. In my experience, it is always marked in the carnivora, no matter how well they may be fed before or after the operation, though, of course, an animal in good condition will last longer than one already thin, or out of condition in any respect. It reminds me of the rapid loss of flesh often seen in dogs with distemper. Another symptom that impresses one greatly in most cases is the dyspnœa. To look at a dog in the later stages of the cachexia, witness the emaciation, the dyspnœa, the tremors or spasms, the weakness, paralysis, and stupor (cretinism), is to behold a picture never to be forgotten; and all this caused by the removal of a gland weighing, in even a large dog, only a few grammes—so delicately adjusted is the vital mechanism in any mammal. Some stress must be laid on the dullness. A cat that would show every sign of excitement at the sight of a dog is, in an advanced condition of the cachexia, indifferent even when placed in the same cage with this animal.

And while the carnivora from showing the symptoms of the cachexia strumipriva in the most pronounced form are the best suited for demonstration, the same set of symptoms, in greater or less degree, seems to appear in all animals affected, though in the case of man some of them are so indifferently marked that they may escape observation.

It is interesting to note, in this connection, that Dr. James Stewart, of Montreal, has reported a case of myxœdema, preceded by tetany, in which there was complete absence of the thyroid gland.

The change in temperature, decided elevation in the stage of overaction and fall in the stage of depression, witnesses to the great derangement of the vital processes.

A myxœdematous condition occurs in animals from which the thyroid gland has been removed, but this has not been present in any appreciable degree in those on which I have operated, owing probably to the rapid progress towards a fatal issue.

In one of the dogs from which I removed the gland, there were no symptoms after several weeks. I then used the animal for another experiment, and two weeks later it was destroyed.