

experiments carried out by McCallum and Voetglin, the results of which were as follows: The intravenous injection of a 5% sol. of calcium, acetate or lactate, almost instantly relieved the tetany after parathyroidectomy, the relief continuing for 24 hours. Magnesium has similar effect although not so efficient. Potash greatly intensifies the symptoms. Bouchard has shown that of the two constituents of normal urine which produce convulsions when introduced into the circulation, one of them is potash. Therefore calcium lactate sol. produce the same results as the isolated nucleo protoid of the parathyroid in the tetany of the parathyroidectomized dogs. Also, potash produces the same effects as a heavy meat diet that aggravates the condition. Meat we know possesses a rich complement of saline matter, 6.7% of which potash is the largest constituent. These experiments seem to support the view of Starling as given above, and further it would seem that the position of the parathyroids with reference to the thyroid is analogous to the position of the Isles of Langerhans with reference to the pancreas, the forms maintaining that equilibrium between the various salts in the circulation, the latter specially having to do with the carbohydrates.

Etiology.

Exophthalmic goitre is found under very varying conditions. No age seems exempt. Cases are reported in young children. Even old age is not immune. The most cases are found between the ages of 15 and 45. As regards sex the condition is found much more frequently in women than men, the proportion is about 7-1. Climate seems to exert little influence. In localities where simple goitre is common, exophthalmic is more frequent. It does not exact a preference for any race. Even animals contribute their share of victims. Ries and others report cases in horses, dogs, etc. Heredity seems to play a small part in this disease. However, there can be no doubt that it is more common in neuropathic families and among persons of a neuropathic tendency. For a long time the question of fright or of nervous shocks seemed to be a causative feature, or any prolonged worry or excitement, those factors which seem to draw strongly on the resources of the nervous system. The acute infectious diseases may predispose to an attack of Grave's disease. Injury to the head may develop an acute attack of the disease, as in one case I had, where patient was thrown from buggy alighting on her head. The simple goitre which had existed seemed to take on all the character and symptoms of acute exacerbation of Grave's disease.

Symptoms.

The clinical picture of a case of Grave's disease is a striking one. The most persistent of all symptoms is *Tachycardia*. Pulse may range