

weakness ; the strong in mind and body are never its victims. Let our efforts, then, be directed to the building up of the physical nature of our patients, so that they may enjoy that greatest of all boons, a sound mind in a sound body.—*Medical and Surgical Reporter, Phila.*

CHLORATE OF POTASH IN THE HÆMORRHAGIC DIATHESIS.

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The therapeutic value of chlorate of potash is, to a certain extent, recognized by the profession. This medicine has not, however, in my mind, received the attention to which it is properly entitled. Its sphere of usefulness has a much wider range than has been accorded to it, for there is not in the catalogue of the *Pharmacopœia*, according to my experience, a single remedy so many-sided, whether given alone or in combination, as this crystalline body, the product of the laboratory.

At its introduction, this salt was principally recommended as an antidote to scurvy. It is now prescribed for throat affections, for scarlatina, for low fevers, for blood-poisoning, etc. I am convinced, however, that it will yet be recognized as a most potent agent in the treatment and cure of all maladies dependent on suboxidation, on defective nutrition, secretion, excretion, aeration, and molecular metamorphoses. Nor need it be considered strange that important results should follow its administration, when we remember that the elements of which it is mainly composed, viz : oxygen and potassium are indispensable to the genesis of healthy arterial blood, and to the recuperation of its nutritive powers, when, after making the circuit of the system, it returns to the heart as venous blood of darkened color and impaired coagulability.

By the agency of the first-named, chiefly through the organs of respiration, the blood is chemically changed, and its vitality renewed by the metamorphosis of the corpuscles. Oxygen is, as we all know, required for other important purposes ; notably for the conversion of the phosphorus and sulphur which are found in the protein compounds into phosphoric and sulphuric acids, and their subsequent combination with bases. The other elementary substance, potassium, also operates in the circulation as an oxidizing agent ; for, according to Bence Jones, "alkalies furnish, out and in the body, the most marked evidence of assisting in oxidizing actions." This alkali, too, appears to subserve another important purpose, as, according to Franz Simon, the basic salts of potash and soda in the blood serve for the purpose of combining with the lactic, fatty, uric, and probably carbonic acids that are continually secreted during metamorphosis. (*Vide Simon's Chemistry*, vol. 1, page 152).

To the general use of the potato, which contains an abundance of potash, combined with a vegetable acid, may fairly be attributed the rarity of scorbutus in modern times. To its absence as an article of food during periods of scarcity and famine and the substitution of a bread and tea or rice diet, I have credited many cases of purpura and scurvy which have come before me. The late Dr. Baly has stated that scurvy was most prevalent in prisons where no potatoes were used. Dr. Garrod, in 1848, demonstrated that scorbutic blood was deficient in potash ; and, more recently, Dr. Dickinson, in the pages of the *British Medical Journal*, has attributed with apparent probability, the existence of lardaceous disease to a deficiency of potash in the white corpuscles. The importance of those elements, considered singly, will not be questioned. The consideration then arises : In what manner do those agents, combined as chlorate of potash, act upon the system ? This can, in the present state of our knowledge, only be guessed at ; but, judging from analogy, and from the results of observation, it may be surmised that, after the reception of a solution of the salt in the stomach, one portion, obeying the law that governs the action of the nitrate and iodide of potassium, is immediately carried out of the system by the kidneys, and may be detected unchanged in the urine. Another part, borrowing the language of Bence Jones, as applied to soluble salt of iron, "diffuses in the liquor sanguinis into every texture, into the blood-globules and white corpuscles, making a greater formation of hæmo-crystalline, and thereby promoting that combination with protagon, on which the formation of new blood-globules depends." And, further : "By dialysis, all crystalloid medicines act as directly on the textures as on the blood ; they act according to their chemical power when they enter the textures, and according to the chemical and physical properties of which the different textures are composed." The remainder is supposed to part with three equivalents of oxygen in the blood, leaving, as a residuum, chloride of potassium, which is found in the urine as well as in the blood of which it is a normal constituent. The probability of the theory of direct absorption of these equivalents of oxygen is strengthened by observation, which shows that the constitutional changes induced by the persevering use of chlorate of potash are similar to those ascribed by Beddoes, Hill, Thornton, Birch, and other writers, to the direct inhalation of oxygen gas, viz : an improvement in color, an increase of vital and nervous energy and physical power, and the more healthful performance of all the nutritive and secretory functions of animal life.

It is, however, with chlorate of potash as a hæmostatic remedy that we are at present concerned ; and it shall be my endeavor to demonstrate that, in its intelligent use, will be found a definite remedy for a specific diathesis, thus fulfilling within its own limits the prediction of John Simon,