

marks the existence of a putrefactive process of intestinal origin, and when there is found a confusional insanity with digestive troubles, indicating mal-assimilation, highly colored urine, we should at once make an examination of the urine for indican, when we shall find its presence is closely connected with the absorption of toxic substances. Some years ago the late Sir Andrew Clark revolutionized the treatment of anæmia, and instead of giving iron in large doses, he recommended flushing out the intestinal tract with salinæ. He was one of the first to explain the connection between anæmia and autotoxis as the result of the absorption of the products of intestinal putrefaction. He found in anæmia that there was a deficiency of hæmaglobin in the red corpuscles, which were diminished in size, and which he attributed to the poisonous products seizing upon the corpuscles and driving out the hæmaglobin, which has a wonderful affinity for oxygen and readily absorbs. He also found in anæmia that the patients were constipated, had no appetite, *mentally* and physically weak, and were suffering from mal-assimilation and the effects of intestinal fermentation, and on examination of the urine indican was usually discovered. The presence of indican in the urine is due to the absorption of indol from the intestines, the latter being one of the final products of putrefaction by the action pancreatic juice or proteids. It has been ascertained that if a subcutaneous injection of indol be made indican appears suddenly in the urine. In testing for indican I have generally employed Jaffe's test which consists in mixing equal quantities of urine and hydrochlorous acids, and adding a few drops of a solution of chloride of lime; the mixture becomes first clear, then blue.

The most common cases which occur from autotoxis are those where there is great excitement, insomnia, confusion of ideas, and constipation, followed by illusions and hallucinations. A case of this kind coming under my care generally is given a saline and is very often soon as well as ever.

The functions of the brain and spinal cord may be so affected by the absorption into the system of toxic material through constipation that a temporary state of insanity may develop. This is most likely to occur when the nitrogenous portion of our food has passed through the small intestines undigested, and remains