

Carolina, equipped with a water-carriage system of sewage disposal, new cases of pellagra were relatively few. In two mill villages completely equipped with a water carriage sewer system, it was impossible to find cases of pellagra which had certainly originated there. Individuals suffering from pellagra contracted elsewhere were not lacking in these communities.

54 (871)

The fatal action of magnesium salts by absorption from the intestines and the resuscitation by calcium.

By J. AUER and S. J. MELTZER.

[From the Department of Physiology and Pharmacology of the Rockefeller Institute.]

A. Under ether anesthesia, the duodenum of a cat was exposed, ligated, a cannula inserted and fixed in the direction of the small intestines and the abdomen closed so as to permit the rubber tubing part of the cannula which was closed by a hemostatic forceps to protrude. The animal was then permitted to come out from the influence of ether and was wide awake. Ten c.c. of a 20 per cent. solution of $MgCl_2$ per kilo of body weight were now injected through the rubber tubing into the small intestines. The animal died after twenty five minutes by respiratory paralysis without any asphyctic convulsions; the heart continued to beat a little longer.

B. Another cat in which preparation and procedure was the same as in A. But when the respiration began to fail, artificial respiration by the pharyngeal method of Meltzer was started and through a venous cannula ten c.c. of a 2.5 per cent. solution of $CaCl_2$ was slowly injected. Spontaneous respiration soon appeared and the animal was resuscitated.

The experiments show, against the generally accepted view, that magnesium salts are rapidly absorbed from the intestines. They show further that the method of injecting magnesium salts into the small intestines after laparotomies as recommended by McCosh and practiced by some surgeons contains an element of considerable danger.