

been very much overrated. While the vomited substances showed an acid reaction, this was not due to the presence of free hydrochloric acid.

In view of the fact that the patient ejected as much as thirty ounces at one time, it seems reasonable to suppose that the remaining portion of the duodenum may have already begun to show distension sufficient to produce a sort of compensatory receptacle for food—perhaps nature's attempt in the direction of the new formation of a stomach.

In endeavoring to explain vomiting without a stomach, we should remember that the act itself is far from a process. It is due to nervous action on a complex motor apparatus, consisting of pharynx, esophagus, stomach, diaphragm and abdominal muscles.

It is not surprising, therefore, to have witnessed in this woman an ordinary attack of bilious vomiting superinduced by a mere psychical disturbance.

—From "N. Y. Medical Record."

# EXSTROPHY OF THE BLADDER: SUCCESSFUL IMPLANTATION OF THE URETERS INTO THE RECTUM.

Dr. G. R. Fowler presented a case of exstrophy of the bladder, in which implantation of the ureters into the rectum, by a new and original method, had been performed. The history of the case is as follows:

E. W., aged six, referred by Dr. McCleary, was admitted to the Brooklyn Hospital, with exstrophy of the bladder and epispadias. In view of the unsatisfactory results following the plastic procedures designed to restore the defect in the anterior abdominal and bladder walls in this class of cases heretofore in use, it was decided to utilize the rectum, as a receptacle for the urine, which according to O'Bierne, is practically empty during the intervals of defecation, the feces being stored at the sigmoid flexure.

The abdomen was opened in the median line, with the patient in the Trendelenburg position, the rectum being thoroughly cleansed primarily.

The ureters were identified in their relation to the vessels, the posterior layer of the peritoneum incised for a sufficient extent to expose them freely, and ureters traced to their termination upon the bladder wall, from which they were detached. The ends of the ureters were cut off obliquely.

A longitudinal incision seven centimeters long was made in the anterior wall of the rectum, only the serous and muscular coats being included in the incision. The edges of this incision were retracted, a diamond-shaped space in the submucous space being thus exposed. A tongue-shaped flap of mucous membrane, with its base directed upward, was cut from the mucous membrane of the bowel in the lower half of the diamond. This tongue-shaped flap was doubled upon itself in an upward direction in such a manner that one-half of its mucous surface presented anteriorly, where it was secured by one or two catgut sutures. A flap was thus secured, both sides of which were covered with mucous membrane.

The ureters were now placed in the incision with their obliquely cut ends lying upon the presenting mucous-membrane surface of the flap. Two catgut sutures served to secure the ureters in position at this point, and two more were placed in the space represented in the upper half of the diamond, care being taken that these sutures did not invade the lumen of the ureters. The flap-valve and attached ends of the ureters were then pushed into the cavity of the rectum, and the rectal wound closed as follows: The gap in the mucous membrane left by the reflected half of the tongue-shaped flap was first sutured by a running catgut suture. The original wound in the rectal wall was then closed by fine silk sutures, the upper two or three of these being likewise utilized for still further securing the ureters where they passed in the submucous space in the upper half of the diamond. The abdominal wound was then closed.

Prompt recovery followed the operation. The rectum became remarkably tolerant of the presence of urine from the first day following the operation, urination occurring per rectum on an average of every three hours. As time passed this toleration became more pronounced, until at the pres-