

that they prevent the action of the trypsin, papoid prevents duodenal indigestion by taking the place of the pancreatic ferment. As Herschell points out, it is obviously of no use to give pancreatine by the mouth, as it is at once destroyed by the action of the stomach, and it is practically impossible to administer sufficient alkali to neutralize the excess of acid, and it would, moreover, be unwise, because it would stimulate still further the secretion of the acid. Papoid is of the greatest use here, because its activity is not materially affected by contact with acid.

In gastralgia, which often accompanies the condition just named, papoid, with bicarbonate of sodium, gives immediate relief. On account of its well-marked sedative action, it is also useful in irritable stomach, nausea, and vomiting. In seasickness, I have not had an opportunity as yet of using it, but I would anticipate decided relief from its administration. In gastric catarrh and the catarrhal conditions of the intestinal tract, popularly known as biliousness, papoid administered in hot water fifteen minutes before meals, or upon rising in the morning, cleanses off the mucus and places the mucous coat of the digestive organs in a good condition for secretion. Constipation, especially in children, is often caused by imperfect digestion. In infants, for instance, the fecal masses consist largely of caseine. Here, a digestive agent is the rational remedy to administer, and, in fact, I have used papoid with good results in just such cases, even in very young infants. On account of its sedative action, it is very efficient for the relief of colic in infants, as well as persistent vomiting. Its antiseptic action and its ability to digest in the presence of antiseptic agents makes it useful in the treatment of irritative diarrhoea in young children, to whom it may be given in combination with salol or salicylate of bismuth. In aepsia of young children, or in that form of deficiency of the gastric juice in adults due to atrophy of the gastric follicles as the result of chronic catarrhal processes, the glycerin solution of papoid (1 to 20), is especially effective. It is permanent and retains its activity for a long time, whereas watery solutions should be freshly made or they will not keep their digestive power. (This may possibly be explained on the ground that in the presence of water, papoid, being an albuminoid

body, partly undergoes hydration and digests itself.) Furthermore, as already stated, watery solutions of papoid, like other albuminous fluids, are apt to become attacked by bacteria and undergo decomposition after standing for several days.

The uses of papoid in treating disorders of the digestive organs may be summarized somewhat as follows :

1. In actual or relative deficiency of the gastric juice, or its constituents.
 - (a) Diminished secretion of gastric juice as a whole. Apepsia. Anæmia and deficient blood supply. Wasting diseases.
 - (b) Diminished proportion of pepsin. Atonic dyspepsia. Atrophy of gastric tubules.
 - (c) Diminution of hydrochloric acid. Achlorhydria. Carcinoma.
 - (d) Relative deficiency of gastric juice. Over-feeding.
2. In gastric catarrh.
 - (a) Where there is a tenacious mucus to be removed, thus enabling the food to come in contact with the mucous membrane.
 - (b) Where there is impaired digestion.
3. In excessive secretion of acid.
 - (a) To prevent duodenal dyspepsia.
4. In gastralgia, irritable stomach, nausea or vomiting.
5. In intestinal disorders.
 - (a) In constipation due to indigestion.
 - (b) In diarrhoea, as a sedative.
 - (c) In intestinal worms. (This claim the writer has not personally verified, but as the intestinal mucus which shields the worms is removed by papoid, it is easily understood that their removal would naturally result after its administration.)
6. In infectious disorders of the intestinal tract.
 - (a) Where there is abnormal fermentation; by its antiseptic action, which may be heightened by combination.
 - (b) Where there are foreign substances present, its detergent effect may be utilized in cleaning out the debris from the intestinal contents by digestion.
7. In infantile indigestion; here papoid not only readily peptonizes cow's milk, but the result-