RETROGRADE JEJUNOGASTRIC INTUSSUSCEPTION THROUGH A SUBTOTAL GASTRECTOMY STOMA

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IN 1935, Ducey and McNamara[1] reported a case of retrograde jejunogastric intussusception through a gastro-enterostomy stoma. In a brief survey of the literature the authors found 36 instances of this rather unusual sequela of surgery for relief of peptic ulcer.

The recently encountered case of retrograde jejunogastric intussusception, which forms the basis of this report, was similar in all respects to the one previously described by these authors, with the exception that in this case intussusception occurred through a partial gastrectomy stoma, in the earlier case through a gastro-enterostomy stoma. This fact is of special interest because in recent years gastrectomy has replaced gastro-enterostomy almost universally as the operation of choice for relief of ulcer or cancer. It is believed that this is the first case recorded in which jejunogastric intussusception occurred through a partial gastrectomy stoma.

Case Report.—A. L.; white, male, age 50, gave a history of chancre 20 years ago. He had had inadequate antiluetic treatment, and tabes dorsalis had developed. He complained of "stomach trouble" for many years, and five years prior to the present admission a gastro-enterostomy had been performed for relief of peptic ulcer.

On July 19, 1943, the patient was admitted to the hospital complaining of pain in the upper abdomen, especially severe before meals, and vomiting of "coffee ground" material. Occult blood was detected in the stools. The abdomen was tender. The clinical diagnosis was recurrent ulcer, probably in the gastro-enterostomy stoma, and operation was advised. The patient showed the ataxia of tabes dorsalis. Serologic tests of the spinal fluid were positive. The Wassermann test of the blood was negative.

At operation, September 9, 1943, two large marginal ulcers of the gastro-enterostomy stoma were found. The old anastomosis was excised and a subtotal gastrectomy was performed. The patient made an uneventful recovery and was discharged.

On November 17, 1943, the patient was readmitted, complaining of vomiting and pain in the upper abdomen. The pain was first experienced two weeks before admission (just one week after previous discharge). He had vomited persistently for the last four days. At the time of admission the patient was extremely dehydrated and semicomatose. The vomitus became fecal in type.

The heart and lungs were negative. The abdomen showed an old right upper paramedian scar and a recent but well healed upper midline incision. There was a fullness in the upper abdomen, indefinite in outline and apparently not the liver. The lower abdomen was flat. The patient rapidly lapsed into coma and expired. A tentative diagnosis of intestinal obstruction was made, but immediate surgery was deemed inadvisable due to the patient's extremely grave condition.

Autopsy.—On opening the peritoneal cavity many old fibrous adhesions were noted. There was massive dilatation of the stomach, which measured 50 cm. in length. The lower segment of the stomach had been resected. A retrograde jejunogastric intussusception of the efferent portion of the jejunum had occurred through the gastrectomy stoma.

There was marked dilatation of the afferent loop of the jejunum. The small intestine below the intussusception was collapsed.

On section of the stomach, it was noted that the intussuscepted portion of the jejunum formed a stovepipe-like sleeve, so that there was a double layer of intestine in the stomach. The length of the sausage-like mass in the stomach measured 25 cm., when stretched out it measured in excess of 50 cm. The greater part of the length of the jejunum found in the stomach was partially digested and gangrenous (Fig. 1).

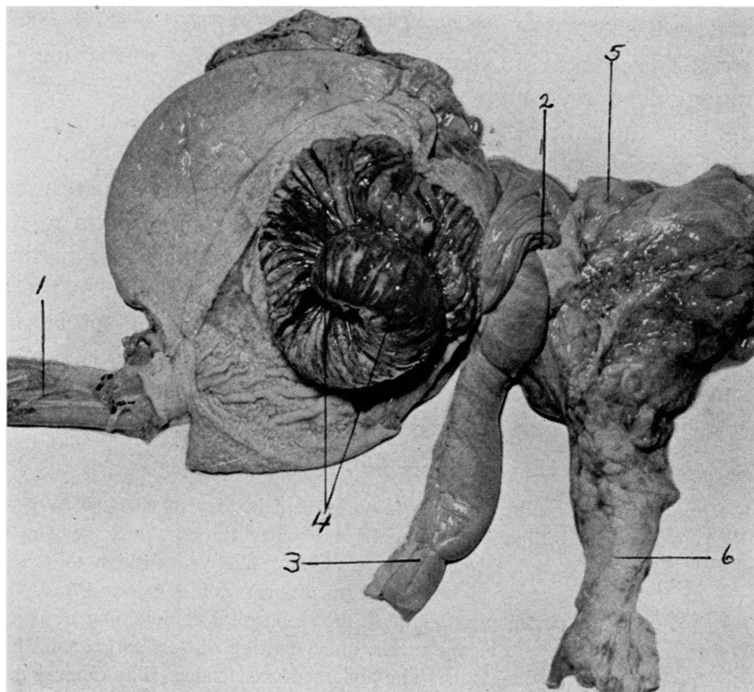

FIG. 1.—Necropsy specimen, posterior view. 1. Esophagus; 2. site of stoma; 3. efferent loop of jejunum; 4. telescoped loop of jejunum filling stomach; 5. blind end of duodenum; 6. pancreas.

There were many adhesions in the area of the stomach and around the blind end of the duodenum. The portion of the small intestine below the intussusception and the large intestine were grossly negative.

Anatomic Diagnosis: Retrograde jejunogastric intussusception through an old partial gastrectomy stoma.

DISCUSSION.—Ducey and McNamara (1937) found 36 cases of jejunogastric intussusception, and added a case of their own. Schackman (1940) notes additional cases by Bonomi (1937), Greenwood (1937) and Otero (1938). Schackman states that if a gastro-enterostomy has both an afferent and an efferent jejunal loop, three types of jejunogastric intussusception may occur: Type I—The afferent loop may intussuscept through into the stomach. Type II—The efferent loop may undergo retrograde intussusception and either stop short of, or pass through, the gastro-enterostomy stoma. Type III—Both afferent and efferent loops together may intussuscept through into the stomach.

Schackman reports a case of Type III in which a preoperative diagnosis of

jejunogastric intussusception within a short time after onset of symptoms, and patient came to operation 15 hours later. The intussusception involving about 3.5 feet of red, congested jejunum was reduced. The gastro-enterostomy stoma was seen and appeared normal apart from a hemorrhagic area 0.5 x 0.5 inches, due to extravasated blood following mechanical congestion on the anterior surface of the anastomosis. No effort was made to anchor the jejunum. The patient made an uneventful recovery, and later by gastroscopy the gastro-enterostomy was demonstrated to function well.

Schackman stresses the necessity for early diagnosis leading to immediate surgery in these cases. From his study he finds that in Types II and III there is a 50 per cent mortality if operation is delayed more than 48 hours after onset of symptoms. Schackman summarizes: "The condition should be considered if ever a patient has abdominal pain and vomiting, with or without hematemesis, coming on at any time after a gastro-enterostomy."

Chamberlin (1940) divides into two clinical groups the reported cases of retrograde intussusception of the jejunum into the stomach (a sequel following gastro-enterostomy) as follows:

"In one group the patients have a brief illness evidenced by epigastric pain and vomiting first of food, then of bile and finally blood. An epigastric tumor may be palpated above and to the left of the umbilicus. Visible peristalsis and upper abdominal rigidity are often present. The usual preoperative diagnoses have been high intestinal obstruction, a ruptured viscus, or an acute surgical abdomen. In this group the prognosis is grave and surgical intervention should be immediate.

The other group of patients is composed of those who maintain a state of chronic invalidism following a gastro-enterostomy for peptic ulcer. The characteristic symptoms beginning at any time from five days to 14, or more, years after operation are epigastric pain, nausea and vomiting which occur at irregular intervals and subside spontaneously. The author adds that in these patients, as in the case of chronic recurrent jejunogastric intussusception through a gastro-enterostomy stoma which he reports, radiographic examination aids in establishing the diagnosis. In this unusual case the intussusception demonstrated repeatedly by fluoroscopic methods was not in evidence when celiotomy was performed about ten days later. The author states that the evidence is conclusive that the patient had a retrograde intussusception of the jejunum which spontaneously reduced itself. The clinical history suggests that this may have occurred many times before the lesion was found, and the history of occasional vomiting attacks subsequent to the operation suggests that it continues to occur.

The case which forms the basis of this report differs from the similar cases in the literature in that the intussusception occurred through a partial gastrectomy stoma rather than through a gastro-enterostomy stoma. It is also interesting that the intussusception occurred so soon after gastrectomy. The operation was performed September 19, 1943 and the first symptoms occurred about six weeks later. Bettman and Baldwin in their résumé noted that the

accident had occurred as early as one year and as late as 16 years after gastro-enterostomy. Due to the delay (two weeks) which intervened between the onset of the initial symptoms (pain and vomiting), and on return of the patient to the hospital the patient was almost moribund and was beyond the aid of surgery when seen. This stresses the importance of early diagnosis and immediate surgery in these cases.

SUMMARY

1. A case is presented in which retrograde intussusception of the jejunum occurred through a gastrectomy stoma.

2. It is important that the possibility of retrograde intussusception of the jejunum through the stoma be considered whenever suggestive symptoms, such as severe pain and bloody vomitus occur in a patient who has been subjected to gastro-enterostomy or subtotal gastrectomy.

3. An early diagnosis is important because immediate surgery constitutes the only hope, except in the chronic type as described by Chamberlin.

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