Retrograde Jejuno gastric Intussusception with Strangulation after Posterior Gastrojejunostomy

AY Kshirsagar*, SL Shinde⁺, YB Langade[#], SG Pujari^{**}, AS Jeur⁺⁺

MJAFI 2008; 64 : 282-283

Key Words : Posterior gastrojejunostomy; Retrograde jejuno gastric intussusception; Strangulation

Introduction

Jejuno gastric intussusception is a rare complication of gastrojejunostomy or partial gastrectomy [1,2]. Bozzi described the first case of this complication in 1914. Around 200 cases have been reported in the literature till now. This paper reports a case of retrograde jejuno gastric intussusception of efferent loop with strangulation developing in a 60 year old male patient who underwent surgery for acid peptic disease 15 years back, the details of which were not known.

Case Report

A 60 year old male patient was admitted with complaints of pain in the abdomen with coffee coloured vomiting since four days. Fifteen years earlier, he had undergone some kind of gastric surgery for acid peptic disease but details of that were not available. On physical examination the patient was dehydrated. Pulse rate was 108/minute and blood pressure was 100/60 mmHg. There was an evidence of upper midline abdominal scar of previous laparotomy. A tender lump was palpable in the epigastric region with signs of localized peritonitis. Laboratory investigations showed haemoglobin 8 gms %, white cell count 20,500/cmm with 80% polymorphs and 20% lymphocytes. Ultrasonography (USG) abdomen showed stomach full of aperistaltic bowel loops. An emergency upper gastrointestinal endoscopy was carried out which revealed an edematous blackened mass with multiple mucosal folds and superficial ulceration along with black coloured fluid in the stomach.

After initial treatment with intravenous fluids, nasogastric suction and antibiotics emergency exploratory laprotomy was carried out. It revealed a soft mass palpable in stomach with evidence of a posterior gastro-jejuno stomy. Part of the efferent loop of jejunum was seen blackened. Dismantling of posterior gastro-jejuno stomy showed an efferent loop jejunum about 30cm in length herniating into stomach leading to retrograde intussusception. The loop was strangulated with gangrenous changes.

By gentle traction efferent loop of jejunum was delivered outside the stomach completely. Resection of the gangrenous loop with end-to-end jejunojejunal anastomosis along with closure of the posterior wall gastrotomy was done after confirming normal duodenal patency. The postoperative recovery was uneventful and he was discharged on the ninth postoperative day.

Discussion

Retrograde jejuno gastric intussusception is a rare acute abdominal condition [1,2], where the small bowel loops get incarcerated and strangulated inside the stomach. This retrograde jejuno gastric intussusception is rare complication after gastric surgery [2].

To date, around 200 cases of jejuno gastric intussusception have been reported in the world literature. The widely accepted anatomical classification proposed by Shackman distinguishes three categories of jejuno gastric intussusception [3,4]; Type I: afferent loop intussusception (antegrade), Type II: efferent loop intussusception (retrograde) and Type III: combined form.

The mechanism of jejuno gastric intussusception is poorly understood [3]. Suggested underlying causes includes a long afferent loop, jejunal spasm with abnormal motility, increased motility of efferent loop, adhesions leading to intussusception of a more mobile segment into fixed segment, widening of upper jejunum, vomiting, pregnancy, labour and other causes of increased intraabdominal pressure, dilated atonic stomach and retrograde peristalsis [3].

Clinically patients with jejuno gastric intussusception may be divided into two types of presentations [1,3], Type 1 acute fulminant and Type 2 chronic intermittent. In acute form, onset is usually sudden and consists of colicky or constant upper abdominal pain associated with

*Professor, ⁺Associate Professor, [#]Resident (Department of Surgery), Krishna Hospital and Medical Research Centre, Karad, Maharashtra.

Fig. 1 : Pre operative endoscopic photograph of retrograde jejuno gastric intussusception.

vomiting. In chronic form, the symptoms may be roughly similar to the acute form but are milder transient and sudden spontaneous.

The presence of a mobile mass in association with pain and vomiting in a patient who has had a previous gastric surgery is considered virtually pathognomonic of acute retrograde intussusception. However as most of the reported cases have not been diagnosed preoperatively, it requires high index of suspicion.

The treatment of acute variant of jejuno gastric intussusception is prompt surgery. The reported mortality rate ranges from 10% for treatment within the first 48 hours to 50% with a 96-hour delay [5]. The surgical options available are manual reduction, resection of gangrenous bowel and revision of anastomosis. Fixation of the jejunum to adjacent tissue like mesocolon, colon, or stomach may be added to prevent recurrence[2].

Conflicts of Interest

None identified

References

1. Archimandritis AJ, Hastzopoulos N, Hatzinikolaou N, Sougioultzis S, Kourtesas D, Papastratis G, et al. Jejuno gastric intussusception presented with hematemesis : a case presentation and review of literature. BMC Gastroenterology

Fig. 2 : Intra operative photograph showing gangrenous jejunal segment after dismantling.

Fig. 3 : Intra operative photograph showing revision of gastrojejunostomy after resection and anastomosis of gangrenous jejunal segment.

- 2001; 1: 1-4.
2. Bapaye M, Kolte S, Pai K, Godse A, Pardeshi A, Bhav A, et al. Jejuno gastric intussusception presenting with outlet obstruction. Indian J Gastroenterol 2003; 22 : 31-2.
3. Bakhsh K, Igbiov A, Egere JU, Ali A, Butt MS, Rehan AM. Jejuno gastric intussusception: a rare cause of life threatening hematemesis. Annals Saudi Med 1997; 17 : 328-30.
4. Reyelt WP Jr, Anderson AA. Retrograde Jejuno gastric Intussusception. Surg Gynecol Obstet 1964; 119 : 1305-11.
5. Walstad P, Ritter J, Arroz V. Delayed jejuno gastric intussusception after gastric surgery: an ever-present threat. Am Surg 1972; 38(3) : 172-75.