CASE REPORT

RETROGRADE JEJUNOJEJUNO-GASTRIC INTUSSUSCEPTION: A RARE COMPLICATION OF GASTROJEJUNOSTOMY

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ABSTRACT: Gastrojejunostomy was one of most frequently performed surgical procedure 2-3 decades back before the era of proton pump inhibitors. Though other complications are more common, retrograde jejunogastric intussusception is a rare serious complication with few cases reported in world literature. Early diagnosis and high index of suspicion can dramatically reduce the mortality as this condition may lead to strangulation. We report a case of 55 year old man with history of gastrojejunostomy done 21 years back found to have retrograde jejunojejuno-gastric intussusecption that was managed successfully with dismantling of gastrojejunostomy and pyloroplasty.

KEYWORDS: Jejunojejuno-gastric, Intussusception, Gastrojejunostomy, Laparotomy.

INTRODUCTION: Retrograde jejunogastric intussusception is a rare but potentially life threatening complication of almost every type of gastric surgical procedure and around 300 cases were reported so far. Its presentation mimics acute intestinal obstruction with acute colicky epigastric pain, vomiting and a palpable lump. Surgeons and radiologists should be aware of this condition and high index of suspicion is required to diagnose this condition as it carries risk of mortality of 50% after 48hours of onset of symptoms. We report a case of 55years old male patient diagnosed as retrograde jejunogastric intussusception complicating gastrojejunostomy after 21years with upper gastrointestinal endoscopy and managed successfully with surgery.

CASE REPORT: A 55 years old male patient was referred with sudden onset of pain in upper abdomen for 5 days associated with bilious vomiting of daily 4-6 episodes. He underwent gastrojejunostomy 21 years back. On examination supra umbilical midline laparotomy scar noted. Tenderness noted in epigastrium with no guarding or rigidity. He underwent upper gastro intestinal endoscopy revealing jejunogastric intussusception and ultrasonography also showed the same. Patient was resuscitated and surgery planned. On exploration retrograde jejunojejuno-gastric intussusception through stoma is found. Gastro-jejunostomy dismantled and resection anastomosis with pyloroplasty was done. Post-operative period was uneventful.

DISCUSSION: First case of Retrogradejejuno-gastric intussusceptions is reported by Bozzi in 1914.[1] After that many cases were reported following almost every type of gastric surgery.[2-8] Retrograde jejuno-gastric intussusception is a rare complication with incidence of 0.1% after gastric surgeries.[9] It is so rare that in Mayo clinic over a period of 72 years only 16 cases were reported.[10] The lapse between gastric surgery and intussusceptions ranges from as short as 2 days to as long as 55 years.[11.12] Very few cases of retrograde jejunogastric intussusception were

also reported following gastrostomy tubes and even without preceding gastric surgical procedures.[13]

Schackman et al proposed anatomical classification which was widely accepted till date. It divides the condition into three types – afferent loop intussusceptions (Type I,10%), efferent loop intussusceptions (TypeII,80%) and mixed form (Type III,10%).[14] The exact mechanism of this condition is not known but two major theories-functional and mechanical were proposed. Most widely accepted functional theory is the disordered motility with functional hyper-peristalsis triggered by spasm or hyperacidity.[11,16] Mechanical factors include adhesions leading to intussusceptions of a more mobile segment into fixed segments, a long mesentery, gastric derangement and sudden increase in abdominal pressure.[16,17]

Clinically they can be divided into acute fulminant form and chronic intermittent form based on clinical presentation. Acute type present with features of acute intestinal obstruction as sudden onset of colicky pain abdomen with vomiting with or without hematemesis and a palpable mass in epigastrium which is seen in 50% of cases along with a past history of gastric surgery, which together constitutes the classical triad.[17,18] There will be no ileus or peritoneal irritation due to its intraluminal location. High index of suspicion is required to diagnose this condition in individuals with past history of gastro-jejunostomy as this condition carries high mortality if not treated promptly. Chronic form presents with similar symptoms but these are milder, transient with spontaneous remission most of the times.[19]

In acute form, imaging modalities like ultrasound may form the initial investigation of choice which can show intra gastric tubular image with or without peristalsis.[11] X-ray is occasionally diagnostic.[20] Upper gastrointestinal endoscopy is certainly diagnostic in familiar hands and it should be done after optimal resuscitation.[21] In chronic form, these investigations will be helpful only during symptomatic period making it a diagnostic challenge. Endoscopic provocative test was described using water jet at stoma site, but its efficacy was not assessed in bigger scale owing to rarity of this condition.[22]

Treatment of this condition is surgical. Acute fulminant form requires emergency exploratory laparotomy after correction of dehydration and electrolyte abnormalities. Dismantling of the gastro-jejunostomy is an accepted method depending on the condition and described by most authors, however some cases weremanaged with reduction of intussusception and fixation of the afferent and efferent loops.[11,15,16] Pyloroplasty is alternative and additive procedure to provide drainage as these individuals were vagotomised.[23] It avoids the risk of stomal ulceration also. Chronic form can be managed conservatively until episodes become more frequent or more severe and acute form sets in.

CONCLUSION: Retrograde jejunojejuno-gastric intussusception is a rare but potentially life threatening complication of gastrojejunostomy and it poses a diagnostic challenge owing to its rarity hence high index of suspicion is required to diagnose this condition. Endoscopy in expert hands after adequate resuscitation offers best method of diagnosis. Early intervention with surgical options largely decreases the mortality.

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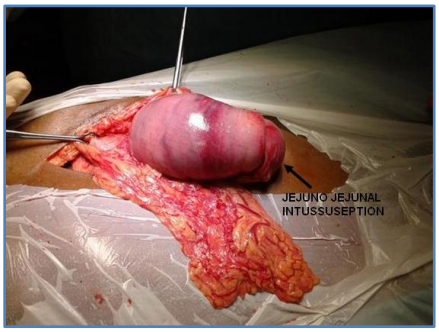

Figure 1

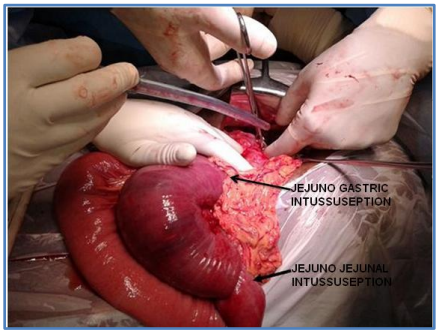

Figure 2

Figure 3

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