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GASTROJEJUNOCOLIC FISTULA : A RARE COMPLICATION AFTER PREVIOUS GASTROJEJUNOSTOMY.

Medical science

KEYWORDS: Gastrojejunocolic fistula, Gastrojejunostomy, colonoscopy, fistula

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ABSTRACT

Introduction : Gastrojejunocolic fistula is rare complication after previous gastrojejunostomy. Patients present with a symptom triad of faecal vomiting/breath,chronic diarrhea and weight loss. In this study, we report our experience in patients presenting with gastrojejuno colic fistula after previous gastrojejunostomy. Clinical presentation and outcomes were analyzed.

Materials and Methods : Between January 1996 and September 2015, 7 patients presented with gastrojejuno colic fistula after previous gastrojejunostomy(GJ) for benign peptic ulcer disease at our department.

Results: During the study period 7 patients had gastrojejunocolic fistula. The mean age at presentation was 35 years (range 26-50 years). All patients were males. The duration of GJ varied from 2 to 12 years(mean 6.43 years). The commonest symptoms were faeculent vomiting and diarrhea seen in 4 out of 7 patients and one patient had vitamin A deficiency. The diagnosis was made with upper gastrointestinal endoscopy and colonoscopy in all cases. All patients underwent triple resection with reconstruction. Two patients had mortality in the post-operative period.

Conclusion: Gastrojejunocloic fistula is a rare complication after gastrojejunostomy. It should be considered as a diagnosis in patients presenting with faecal vomiting, chronic diarrhea, malnutrition and weight loss. Barium studies and Endoscopy help in diagnosis. Definitive surgery can be performed as a single stage procedure with good outcomes after improvement in preoperative nutritional status.

INTRODUCTION

Gastrojejunocolic fistula is rare complication after previous gastrojejunostomy. Czerny, in 1903 reported the first case of gastrojejuno colic fistula following gastro-enterostomy[1]. This can occur years after gastrojejunostomy due to incomplete vagotomy for peptic ulcer disease[2]. Patients present with a symptom triad of faecal vomiting/breath,chronic diarrhea and weight loss[3,4]. Barium enema was earlier considered as investigation of choice, recently, upper gastrointestinal endoscopy and colonoscopy are helpful in diagnosis. Historically, operations were two or three staged. Single staged surgery is performed now with acceptable morbidity and mortality. The overall outcomes have improved due to improved nutrition (total parenteral or total enteral), antibiotics, intensive care and aggresive management.

In this study, we report our experience in patients presenting with gastrojejuno colic fistula after previous gastrojejunostomy. Clinical presentation and outcomes were analyzed.

MATERIALS AND METHODS

Between January 1996 and September 2015, 7 patients presented with gastrojejuno colic fistula after previous gastrojejunostomy(GJ) for benign peptic ulcer disease at our department. Data was retrospectively collected from patient medical records and data base. Details regarding age, sex, symptoms at presentation, duration after previous gastrojejunostomy, co-morbidities, surgery performed and outcomes were analyzed. Follow-up was conducted using postoperative clinical charts and notes.

RESULTS

During the study period 7 patients had gastrojejunocolic fistula. The mean age at presentation was 35 years (range 26-50 years). All patients were males. The duration of GJ varied from 2 to 12 years(mean 6.43 years). The commonest symptoms were faeculent vomiting and diarrhea seen in 4 out of 7 patients and one patient had vitamin A deficiency. The diagnosis was made with upper gastrointestinal endoscopy and colonoscopy in all cases. All patients underwent triple resection with reconstruction. Two patients had mortality in the post-operative period.

DISCUSSION.

Gastrojejunocolic fistula is a late complication after gastrojejunostomy for peptic ulcer disease resulting from simple gastrojejunostomy, inadequate gastric resection, or incomplete vagotomy[2,4]. Gastric surgery for peptic ulcer disease is rarely performed nowadays due to advances in medical line of management(proton pump inhibitors, H2 receptor blockers) and Helicobacter pylori eradication regimens[3]. The fistula can occur as early as 0-5 years after surgery[4].

Most patients present with a classic triad of faecal vomiting, chronic diarrhea and weight loss. Patients can present with perforation[5,6] or with symptoms masquerading as irritable bowel disease[7].

Diagnosis is usually confirmed by barium enema and endoscopy. Barium enema confirms the diagnosis in 95-100 % cases[5,8]. Gastroscopy and colonoscopy are used increasingly for diagnosis either separately or simultaneously[9,10]. Gastrojejuno colic fistula can be overlooked as an ulcer in endoscopy.Presence of faecal matter in the stomach or passing the scope through the fistula to look at the typical pattern of mucosal vascularity help in diagnosis[11]. Contrast enhanced computed tomography abdomen is useful in diagnosis and to rule out underlying malignancy[12].

Patients present with nutritional and electrolyte imbalance due to chronic diarrhea. Patients need to be administered total parenteral nutrition or total enteral nutrition prior to surgery[8,13].Historically, surgeries were either 2 or 3 staged. 3 – staged operation involved a preliminary diversion colostomy to control diarrhea due to presence of colonic contents within the upper intestinal tract.This is followed by resection of fistula and colostomy closure[1]. Mortality is reduced to 5 % by traditional 3- stage repair[14]. Lahey proposed a two-staged procedure consisting of a proximal defunctionalizing ileosigmoidostomy, subtotal gastrectomy and coloectomy[4].Prior to the 1930s treatment generally consisted of resection of fistula without attempts at correction of the ulcer diathesis[15].

At present, one-stage procedure consisting of resection of fistula, colectomy and subtotal gastrectomy is feasible with low morbidity and mortality rates. Feasibility of laparoscopy for one-stage en bloc resection has also been demonstrated[2].

CONCLUSION

Gastrojejunocloic fistula is a rare complication after gastrojejunostomy. It should be considered as a diagnosis in patients presenting with faecal vomiting, chronic diarrhea, malnutrition and weight loss. Barium studies and Endoscopy help in diagnosis. Definitive surgery can be performed as a single stage procedure with good outcomes after improvement in preoperative nutritional status.

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