Case Snippets

stipation since 1 day. On examination there was tachycardia, generalized abdominal distention, guarding and rigidity, and bowel sounds were absent. Per rectal examination was normal. The oral cavity showed melanin spots over the buccal mucosa and lips. Erect abdominal radiograph was suggestive of small bowel obstruction.

Emergency abdominal exploration revealed that the obstruction was due to jejuno-ileal intussusception. On reduction, about 45 cm of jejunum was found to be gangrenous. The invagination was caused by a 2-cm polyp in the jejunum (Fig). Six other polyps varying in size from 0.5 cm to 1.5 cm were found in the small intestine. Resection of the gangrenous intestine along with the portion containing the polyps was done and primary jejuno-ileal anastomosis was performed. The postoperative course was uneventful.

On histology, the 2-cm polyp that had caused intussusception and other polyps of size 1.5 cm showed changes of adenocarcinoma; rest of the polyps showed features of benign disease.

PJS is an autosomal dominant syndrome characterized by mucocutaneous melanin spots with intestinal polyposis. Mutation in the serine/threonine kinase gene STK, also known as LKB1, located on chromosome 19p, has been identified in more than 50% of patients with PJS. The lifetime risk of mucocutaneous lesions approaches 100%, and the risk of polyps in the small intestine (particularly jejunum) and colon is about 50% and 25%, respectively.

PJS predisposes to malignancy of the gastrointestinal tract, pancreas, breast, lung and reproductive organs. The increased incidence of malignancy has been attributed to concurrent presence of adenomatous polyps; a hamartoma-carcinoma sequence has also been considered.

In a series of 34 patients with PJS followed up for a median of 20 years, some form of cancer developed in 53% by average 39.4 years of age. The mean interval from initial diagnosis of PJS to diagnosis of cancer was 19.8 years. In another series, among 72 patients with PJS the relative risk of dying from a gastrointestinal cancer was 13-fold greater than that in the general population and relative risk of dying of any other cancer was 9-fold greater, with 48% chances of dying of cancer by the age of 57 years.

Current recommendations advocate prophylactic endoscopic removal of all polyps. Recent guidelines support complete colorectal surveillance with either colonoscopy or flexible sigmoidoscopy with barium enema at 18 years of age and every 3 years thereafter. Upper gastrointestinal endoscopic surveillance is recommended every 1-2 years from age of 25 years. Others have advocated routine small bowel imaging surveillance every 2 years, with laparotomy and resection for polyps greater than 1.5 cm diameter.

In our patient, the age of detection of small intestinal malignancy was lower than that reported in literature. Surveillance for gastrointestinal, pancreatic, breast and ovarian cancer is appropriate in these patients.

References


Correspondence to: Dr. Porecha, “Ashutosh”, Opp. Ahir Boarding, Amber Cinema Road, Jamnagar 361 008. E-mail: mehulmporecha@rediffmail.com, mehulmporecha@hotmail.com

Received March 21, 2005. Accepted June 24, 2005

Successful closure of spontaneous esophageal perforation (Boerhaave’s syndrome) by endoscopic clipping

Parupudi V J Sriram, Guduru V Rao,* D Nageshwar Reddy

Departments of Gastroenterology and *Gastrointestinal Surgery, Asian Institute of Gastroenterology, Hyderabad

Endoscopic clips have been used mainly for control
of gastrointestinal (GI) bleeding and occasionally for closure of GI perforations. However, closure of spontaneous esophageal perforation (Boerhaave’s syndrome) by clipping has not been reported. We described successful non-surgical closure of spontaneous esophageal perforation by endoscopic clipping in a patient with bilateral pyo pneumothorax and septicemia. [Indian J Gastroenterol 2006;25:39-41]

Endoscopic clips have been used mainly for control of bleeding from gastroduodenal ulcers, and uncommonly for closure of esophageal, gastric, duodenal or colonic perforations.

A 45-year-old man presented with sudden-onset chest pain and breathlessness. Initial evaluation was suggestive of unstable angina and left ventricular failure; the cardiac enzymes were equivocal. He was managed with nitrates, diuretics and heparin. Over the next 48 hours he developed fever, and chest X-ray showed bilateral pleural effusion. Subsequently he developed features of right-sided hydro-pneumothorax. He was started on third-generation cephalosporins; intercostal tube (ICT) drainage revealed purulent fluid. Pleural fluid was exudative with high neutrophil count and negative Gram stain.

On the third day after insertion of ICT, the patient noticed food particles in the drainage fluid. Thoracic CT confirmed the suspicion of esophago-pleural fistula. The patient continued to have high-grade fever and developed bilateral empyema and septicemia. He was kept nil by mouth, started on parenteral nutrition, and continued on intravenous antibiotics; another ICT was inserted on the opposite side. Primary surgical repair was not considered in view of septicemia, and feeding jejunostomy was performed. While the clinical condition improved, the ICT output continued at about 250 mL each.

Upper endoscopy revealed a 1-cm fistulous opening just above the Z-line on the right lateral aspect with evidence of fluid influx on gentle suction, confirming the presence of esophago-pleural fistula (Fig 1A). Under intravenous conscious sedation with propofol, endoscopic clipping of the perforation was performed using a 9-mm end-viewing gastroscope (GF130; Olympus, Tokyo, Japan; working channel 2.8 mm), clipping apparatus (HX-5QR-1; Olympus) and hemoclips (Clip HX-600-133; Olympus). The gastroscope was reoriented to target the fistula towards 2 o’clock position to facilitate clipping. Deploying two clips could successfully close the mouth of the fistulous track (Fig 1B). Over the next 24 hours, the drain output reduced to about 50 mL bilaterally and stopped by the third day. Subsequently both the ICTs were removed and the patient was discharged from the hospital on day 10 after the procedure. Six months post-procedure the patient is asymptomatic and endoscopy revealed focal scarring.

Spontaneous esophageal perforation is usually managed conservatively since it is not often diagnosed in time. If recognized early, surgery in the form of primary repair or gastroesophageal resection is possible. When delayed, infection precludes surgical treatment. Endoscopic clipping has been used to close esophageal tears, and gastric, duodenal and colonic perforations; closure of spontaneous esophageal perforation by clipping has not been reported. Generally clipping of perforations after 48 hours is difficult since the necrotic edges of the perforation do not hold the clips adequately.

Other forms of endoscopic treatment include placement of temporizing plastic endoprostheses in the management of anastomotic leaks. Pross et al described minimally invasive treatment of iatrogenic esophageal perforation by combination of thorascopic posterior mediastinal drainage and deployment of an esophageal self-expanding metal stent. Metal stents are difficult to remove and hence plastic endoprostheses are preferred whenever subsequent removal of the stent is contemplated. While the merits of clipping are obvious, concern may be raised regarding the permanence of closure of perforations. Clips have been reported to remain in position for days to weeks or even months.

To conclude, endoscopic clipping may be useful for non-surgical closure of spontaneous esophageal perforation.

References

Correspondence to: Dr. Sriram, 427 Blue Ridge Drive, Martinez, GA 30907, USA. E-mail: pvjsriram2002@yahoo.com

Received April 28, 2005. Accepted June 26, 2005