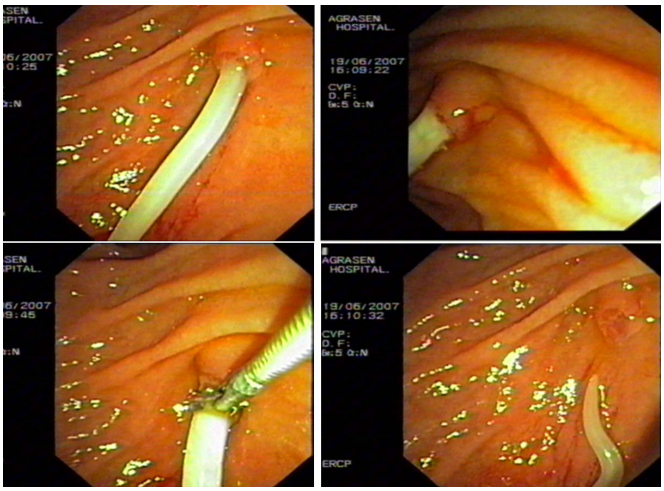

Figure 2 : ERCP showing Ascaris protruding out of the papilla

from the papilla and the body. There was dramatic relief in pain and the patient's general condition improved. Oral feed was started and the patient was discharged four days after ERCP and removal of the worm.

Discussion

The adult worm can invade the biliary or pancreatic ducts, or both, and cause complications such as biliary duct obstruction, cholecystitis, cholangitis and acute pancreatitis. Invasion of the pancreatic duct is rare because of its narrow caliber.[2] A case of a 64-year-old lady with acute pancreatitis was reported by Price et al[3] in 1988, in which pancreatic duct ascariasis was diagnosed based on the characteristic ultrasonographic appearance known as the "four-lines" sign.

Khuroo et al[4] in his report on hepatobiliary and pancreatic ascariasis in India, examined 500 patients out of which 64 patients presented with acute cholecystitis, 121 with acute cholangitis, 280 with biliary colic, four with hepatic abscess and 31 with pancreatitis. The worms were found in various locations including 274 patients having it in their duodenum, 171 patients in the biliary tree, 40 patients in the hepatic channel, eight patients in the gall bladder and seven patients in the pancreatic duct. Phylogenic cholangitis occurred in 27 patients out of which two needed surgical drainage and the remaining 25 improved after ERCP drainage. The worm was removed in 280 patients. Four patients succumbed to their condition including, two due to pancreatitis, one due to cholangitis and one due to hepatic abscess. Reinvasion was noted in 76 patients. Sandouk et al[5] published their experience of 300 patients from Syria and showed that ultrasonography, together with clinical findings, are the mainstay of diagnosing pancreatic ascariasis.

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Colo-cutaneous fistula formation due to delayed mesh migration following lumbar hernia repair : Colonoscopic diagnosis

Introduction

The use of polypropylene meshes (PP mesh) for abdominal wall hernia repair is common and its complications are being increasingly recognized. Delayed migration of mesh is a rare and difficult to diagnose condition because of variable clinical presentations. Migration of mesh into a hollow viscous leading to a colo-cutaneous fistula (CCF) has rarely been reported. We present a case of delayed migration of PP mesh and subsequent CCF formation which was diagnosed by colonoscopy after seven years of open left lumbar hernia repair.

Case report

A 48-year-old male presented with two months history of

feculent discharge from left abdominal flank , low grade fever and abdominal pain. He gave history of open left lumbar hernia (acquired type) repair and mesh implantation 7 years back. A fistulous opening with indurated margins was seen in the left lumbar region. Mild tenderness was present over the left hypochondrium. Bowel sounds were normal. Laboratory investigations revealed a hemoglobin of 10.5 gm/dl with normal erythrocytes and a total leukocyte count of 18,000/mm^3 with 85% polymorphonuclear leukocytes. Blood sugar, renal and liver function tests were normal. Abdominal plain radiographs were normal. Abdominal computed tomography (CT) revealed pericolonic stranding (descending colon) with a soft tissue tract extending through the oblique and rectus muscles, and subcutaneous and cutaneous regions, suggestive of a CCF. Sigmoidoscopy revealed a foreign material protruding into the colon at 30 cm from the anal verge (**Figure 1**). This material was neither movable nor extractable by endoscopic snare. The patient was placed on broad spectrum antibiotics and other supportive measures. Surgical exploration revealed adhesions of the large bowel with the mesh and associated scarring. A fistulous tract extending from the descending colon to the left lumbar region was noted and a PP mesh was found embedded in the descending colon. Removal of the mesh along with resection of the affected bowel segment followed by an anastomosis was performed. The patient is doing well at six-month follow-up.

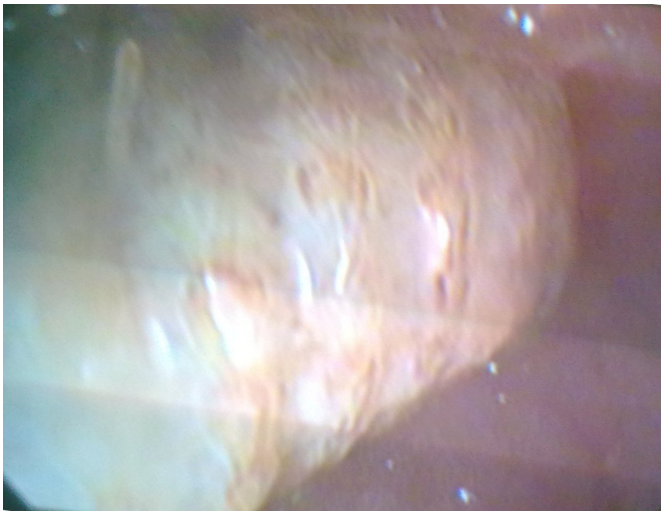

Figure 1: Sigmoidoscopy showing a foreign material protruding into descending colon

Discussion

There is a widespread use of mesh for abdominal wall hernia repair. Migration of mesh could occur soon after surgery or many years later, even after twenty years of hernioplasty.[1]

Mesh migration may have varied presentations depending on the organ involved. Most reported cases in the literature involve the urinary bladder. Intraluminal migration into a hollow viscous is rare.[2] Clinical manifestations of mesh migration into the intestine are variable and can present as abdominal pain, intraabdominal abscess, intestinal obstruction, intestinal perforation, intermittent diarrhoea, haematochezia and fistulae.[3-7] It can even mimic diverticulitis.[8]

Detection of a migrated mesh is very difficult. In plain film radiographs neither the PP nor the expanded polytetraûuorethylene mesh (e-PTFE mesh) are visible. Ultrasound is a useful method for identifying meshes, but it has several limitations. CT scan seems to offer better mesh visualization, but failure to detect migrated PP mesh by CT scans is also common.[9-11] Owing to their different compositions and thickness, the PP and the e-PTFE mesh have different appearances on a CT scan. The PP meshes are visible as lines with a density similar to the adjacent muscles in only 20% of patients however, the e-PTFE mesh appears as a line of increased density visible in all patients.[16] Colonoscopy is the single best investigation for the detection of a mesh which has migrated into the large bowel.[7,8] In our patient the migrated mesh missed by CT was detected by colonoscopy, supporting the observation that CT is a poor modality for such diagnosis.

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Filiform ulcerative colitis-rare entity captured

Filiform polyposis is an uncommon entity that is most often encountered in the colon of patients with a history of IBD. It is characterized by a large number of worm-like polyps lined by histologically normal colonic mucosa. They usually have a thin, straight shape resembling the stalks of polyps without the heads, range in size from 1.5-3.0 cm in length and 0.5 cm in diameter and can occur as solitary polyps or as diffuse polyposis distributed over large areas of the colonic mucosa. Long-term inflammation of the colonic mucosa during chronic IBD with alternating periods of ulceration and healing may lead to the formation of finger-like projections, so-called filiform polyps. Several filiform polyps form large tumor masses, termed giant filiform polyposis. Histologically, the polyps are filiform, with a central core, containing vessels and smooth muscle fibers. Clinicopathologic and immunophenotypic studies regarding filiform polyposis without IBD demonstrate that there is generalized polyposis, considered to be an asymptomatic sequela of ulcerative colitis. Filiform polyposis may resemble villous adenomas on colonoscopy, biopsy should be recommended in all cases. Filiform polyposis alone is not an indication for surgical resection, but complications, such as acute massive hemorrhage or intestinal obstruction, may necessitate surgical intervention.The pathologic specimen of right hemicolectomy shows filiform polyposis in the ascending colon and transverse colon with satellite lesions in a known case of ulcerative colitis.

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