Primary stercoral perforation of the colon – Rare...... but deadly!

Sir,

‘Primary stercoral perforation of the colon’, is a singularly unusual pathological condition, infrequently seen and even less commonly reported. This is defined as a colonic perforation attributable to the pressure effect of a scybalum of faeces on the wall of an otherwise normal colon, in the absence of any other established etiology. Patient demographics show that this condition is seen almost exclusively in the geriatric (>70 years) population. We present here, a case of primary stercoral perforation of the colon in a 21 year old patient, in all probability the youngest patient ever reported with this condition. This report is aimed at bringing to light the significance of this distinct entity, establishing the fact that no age is exempt from its catastrophic consequences and at increasing awareness among surgeons, in order that the patient community at large can benefit from an earlier diagnosis and better management measures.

A 21 year old previously healthy male presented with vomiting and diffuse abdominal pain since morning. He also gave prior history of mild constipation for the last few months. On examination, the patient was febrile, tachycardic and hypotensive. The abdomen was diffusely tender without frank rigidity, bowel sounds were minimal and the rectum was empty. Laboratory data proved unremarkable, with normal blood counts and Hb%, normal liver and renal function tests, serum amylase and lipase. Abdominal ultrasonogram showed subhepatic and right iliac fossa fluid collections. Plain radiography of the abdomen showed free gas under the diaphragm. Laparotomy showed gross faecal contamination and purulent fluid, from a 1.2 cm perforation in the sigmoid colon. There were 3-4 marble-like faecoliths around 1.5 cm in size, lying free within the peritoneal cavity and the left colon contained hard impacted faecalomas. All faecalomas were manually removed and a sigmoid colectomy with a Hartmann’s procedure and a proximal colostomy was performed, followed by a thorough peritoneal lavage. The colon around the perforation was thinned out and surrounding mucosa showed multiple ulcers. Histopathology demonstrated ulcerated colonic mucosa with non-specific inflammatory infiltrate.

Risk factors include prolonged constipation[1], NSAID’s, codeine, amitryptyline, antacids, steroids and heroin[2]. The pathogenesis involves the compression of the colonic mucosa by a hard faecaloma, producing mucosal ischaemia on the antimesenteric border with consequent ulceration and perforation. The patient is typically elderly and presents with abdominal pain, haematochezia and signs of peritonitis with an antecedent history of constipation. Diagnosis is most often made intraoperatively. According to Maurer et al[3], a diagnosis of stercoral perforation is made if (i) the colonic perforation is sized 1 cm or more; (ii) it lies antimesenteric; (iii) faecoliths are found within the colon, protruding through the perforation site or lying within the abdominal cavity; (iv) pressure necrosis or ulcer and chronic inflammatory reaction around the perforation site are present microscopically and (v) no additional colonic pathology is found. The sigmoid colon is the most common site involved, followed by the rectum and descending colon. The entire involved segment needs to be resected, followed by Hartmann’s procedure, a colostomy with a mucous fistula, or a primary anastamosis. Manual evacuation of the remaining faecalomas should also be performed when necessary.

In conclusion, we reiterate that the diagnosis of primary stercoral perforation should be given due consideration where the situation warrants it, not only in the aged but also in the young, otherwise healthy patient. Early and effective management of constipation could help prevent this disastrous condition.

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