

Sigmoid colon perforation by migration of a biliary prosthesis

Perforación de colon sigmoide por migración de una prótesis biliar

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This is the case of a 92-year-old woman with a history of colonic diverticulosis and an endoscopic sphincterotomy with placement of a biliary stent 2 months earlier due to choledocholithiasis, who came to the emergency room with acute abdominal symptoms. Computed tomography revealed pneumoperitoneum secondary to sigmoid perforation by a foreign body. The patient underwent surgery, performing segmental colonic resection and end colostomy due to a sigmoid perforation by the biliary prosthesis (Fig. 1). Evolution is favorable and she is discharged on the eighth postoperative day.

Migration of a biliary stent to the digestive tract is very rare (6%)^{1,2}. It is more common with plastic prostheses, in the treatment of benign biliary strictures, and in the first 3 months after placement¹⁻³. Generally, the migrated prosthesis is expelled with the feces, but on occasions it can cause complications (obstruction, perforation and penetration with fistulas)¹. The duodenum is the most frequent location of complications. Colon perforation is exceptional (< 1%), and in 90% of cases it occurs in the sigma⁴. It has been related to the existence of diverticular disease, hernias and peritoneal adhesions^{1,5}. When reviewing the published cases, a high incidence is also observed in elderly patients (85% over 70 years of age).

Most of the colonic perforations require surgery. In hemodynamically stable patients, with contained perforations and high surgical risk, conservative treatment



Figure 1. Sigmoid colon perforation due to migrated biliary prosthesis.

with antibiotics and endoscopic removal of the prosthesis can be performed^{2,5}. In patients with a migrated prosthesis in the colon without associated complications and with the risk factors described, endoscopic removal should be considered to avoid perforation⁴.

In conclusion, in patients with a biliary prosthesis who present intestinal perforation, the possibility of a complication due to migration of the prosthesis should be considered.

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References

1. Mady RF, Niaz OS, Assal MM. Migrated biliary stent causing perforation of sigmoid colon and pelvic abscess. *BMJ Case Rep* 2015;2015:bcr2014206805.
2. Namdar T, Raffel AM, Topp SA, Namdar L, Alldinger I, Schmitt M, et al. Complications and treatment of migrated biliary endoprotheses: a review of the literature. *World J Gastroenterol*. 2007;13:5397-9.
3. Jones M, George B, Jameson J, Garcea G. Biliary stent migration causing perforation of the cecum and chronic abdominal pain. *BMJ Case Rep*. 2013;2013:bcr2013009124.
4. Jafferbhoy SF, Scriven P, Bannister J, Shiwani MH, Hurlstone P. Endoscopic management of migrated biliary stent causing sigmoid perforation. *BMJ Case Rep*. 2011;2011:bcr0420114078.
5. Virgilio E, Pascarella G, Scandavini CM, Frezza B, Bocchetti T, Balducci G. Colonic perforations caused by migrated plastic biliary stents. *Korean J Radiol*. 2015;16:444-5.