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Case Report

Retention of surgical sponge: An act of providence?

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Introduction

Retained foreign bodies (RFB) are rare causes of lump in abdomen.[1] Presentation several years after surgery is rarer.[1] Discovery of coexistent adjacent colonic tumor, providentially at an early stage, during investigation of such a lump is exceptional. We report such a singular case.

Case report

A 50-year-old female patient, with history of cholecystectomy 5 years back, presented with abdominal discomfort and a painless lump she felt in her abdomen. Examination revealed pallor; healed scar of Kocher's incision; a 10 cm × 10 cm spherical nontender intra-peritoneal lump in right upper quadrant, moving with respiration. Laboratory investigations were unremarkable except low hemoglobin – 7.4 g/dl. Ultrasonography showed dense posterior shadowing of a mass and a pseudokidney sign suggestive of colonic mural thickening, inferior to the shadowing (Fig. 1). Computerized tomogram (CT) showed a well-defined spherical mass with whorled appearance, with heterogeneously hyper dense contents within, abutting the inferior hepatic surface and indenting the gastric antrum/first part of duodenum (Fig. 2). Just inferior to this mass, asymmetric circumferential wall thickening of the right half of transverse colon was noted with associated pericolic lymphadenopathy (Fig. 3). Imaging features being suggestive of gossypiboma, endoscopies were performed to rule out erosion into gut. Gastro-duodenoscopy showed extrinsic compression on the duodenum. Colonoscopy revealed, unexpectedly, a hepatic flexure growth, which proved to be adenocarcinoma on biopsy. Serum carcinoembryonic antigen level was found elevated – 235.4 ng/ml. Exploratory laparotomy revealed a spherical mass, adherent on its outer surface to the parieties and inferior hepatic surface, while its inner hemi-circumference densely adherent to pyloro-duodenum and to a smaller spherical 6 cm × 6 cm colonic mass at hepatic flexure. En-block resection included right hemicolectomy, lymphadenectomy till the origin of middle colic vessels and segmental pyloroduodenal resection (Fig. 4). Cut section showed colonic tumor, inseparably adherent to an encapsulated gossypiboma (Fig. 5). Histopathology confirmed moderately differentiated adenocarcinoma of colon, T_3NoMo – Stage IIA. Patient is well 1 year following treatment.

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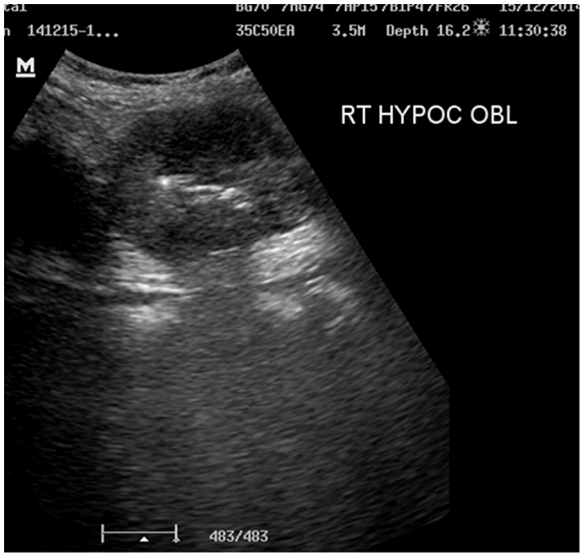

Fig. 1 – USG picture showing posterior shadowing of the mass with pseudokidney sign suggestive of colonic thickening.

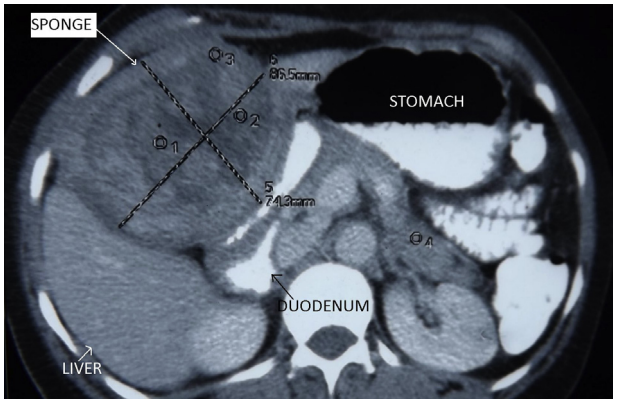

Fig. 2 – CT image showing a well-defined heterogeneous mass abutting the inferior hepatic surface and indenting the gastric antrum and first part of duodenum.

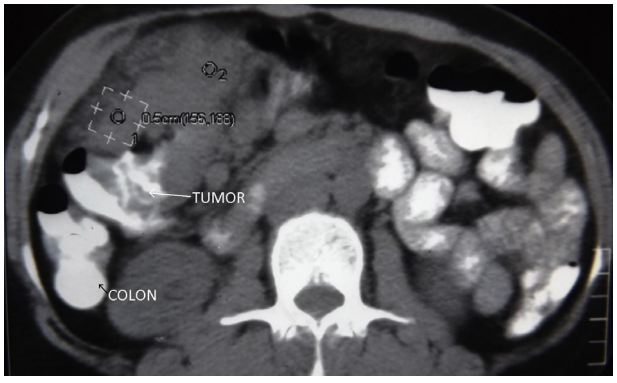

Fig. 3 – Asymmetric circumferential wall thickening of hepatic flexure, just inferior to the mass.

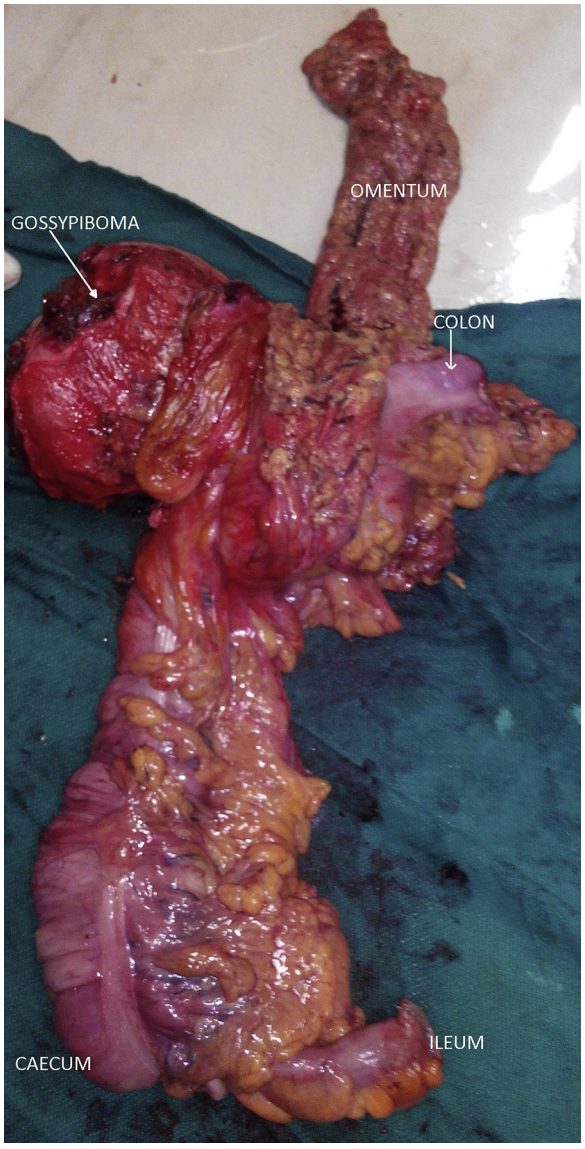

Fig. 4 – Right hemicolectomy specimen with densely adherent gossypiboma.

Discussion

Gossypiboma [*Gossypium* (Latin) – cotton; *boma* (Swahili) – place of concealment], cottonoid or textiloma are terms used for inadvertently retained surgical sponge/gauze following surgery.[1] This occurs with a frequency of 1 in 1000–1500 operations, which is probably a conservative estimate owing to under reporting.[1]

The retained sponge elicits two types of body response.[1] Exudative inflammatory response – often detected in early post-operative period, leading to its early removal. Or, an aseptic encapsulating fibrosis – leading to formation of lump, as in our case. Omentum and gut loops contribute to the encapsulating fibrosis and get firmly adhered to gossypiboma in the process. Hence, obstruction due to adhesions; gastrointestinal bleed/obstruction/perforation/spontaneous extrusion through body orifices due to gut erosion; malabsorbtion due to

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