A rare cecal subepithelial tumor

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QUESTION

A 55-year-old male was referred to the coloproctology department by another hospital for resection of a cecal mass, which was found incidentally during screening colonoscopy. He had no clinical symptoms. He had undergone open repair of a right inguinal hernia 2 years prior to admission. Physical examination revealed no abnormal findings. Routine laboratory data and tumor markers on admission did not show any abnormal findings. Colonoscopy revealed a protruding mass with normal mucosa in the cecum (Figure 1a). It had raised borders and no stalk. Thus, a subepithelial tumor (SET) with external compression of the cecal wall was suspected. When we examined the SET with forceps, it was found to be non-movable and had a hard consistency (Figure 1b). Biopsies revealed the presence of normal colonic mucosa.

What is the most likely diagnosis of the SET in the cecum?

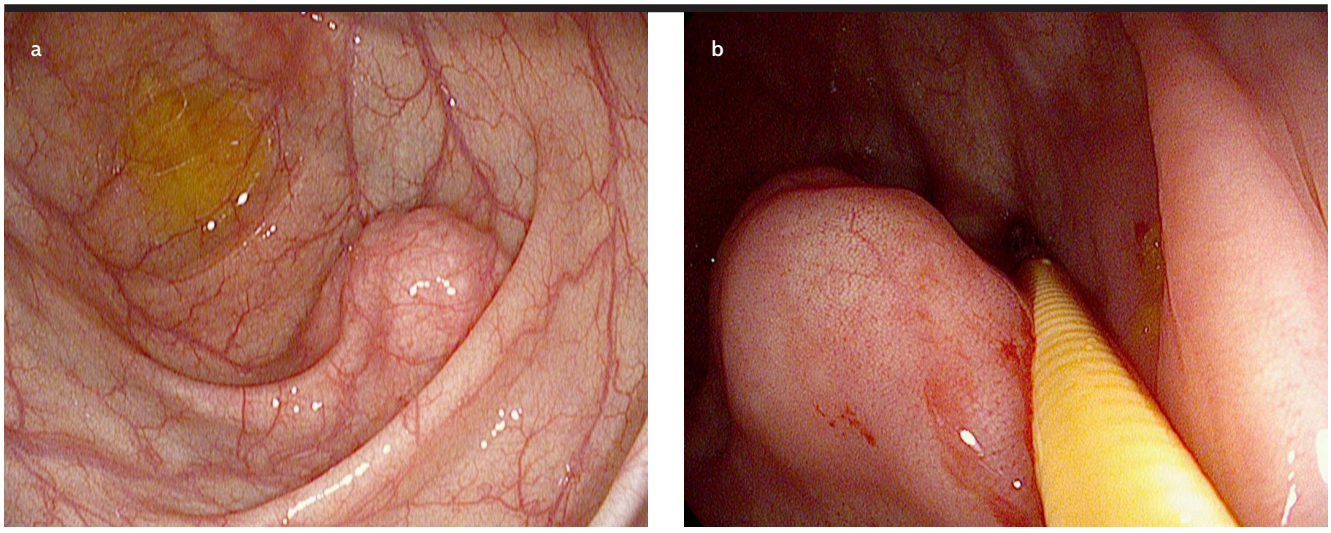

Figure 1. a, b. Colonoscopy revealed a protruding mass with normal mucosa in the cecum (a); non-movable and had a hard consistency (b)

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ANSWER

The mesh plug following inguinal hernia repair presented as a SET in the cecum

Abdominal computed tomography showed a 3-×3-cm, low-density mass in the right inguinal area that compressed the wall of the cecum, which was not associated with lymphadenopathy (Figure 2a, b). With air insufflation during colonoscopy, the cecal wall was apparently pressed against the mesh plug and maintained a conical shape, thereby creating the impression of a mass with extrinsic compression. These findings were consistent with the diagnosis of a mesh plug presenting as a SET in the cecum following inguinal hernia repair.

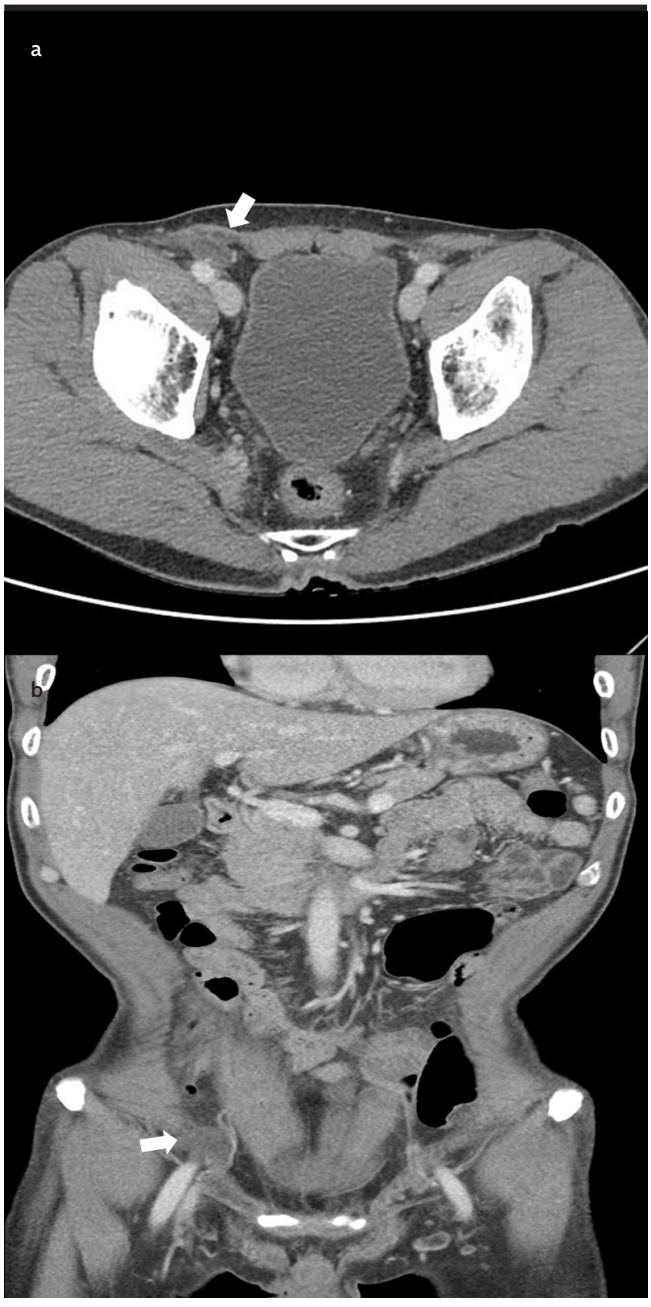

Figure 2. a, b. Abdominal computed tomography showed a 3-×3-cm, low-density mass in the right inguinal area that compressed the wall of the cecum

Subepithelial tumor lesions of the gastrointestinal tract are commonly encountered during routine esophagogastroduodenoscopy (EGD) and colonoscopy. At least 1% of all EGD examinations diagnose SETs. They most commonly occur within the stomach. In addition, subepithelial lesions are often detected during colonoscopy.

Tension-free repair using mesh is a common inguinal hernia surgical procedure because it has a lower recurrence rate, less postoperative discomfort, and provides faster recovery of regular activities (1). The Plug-and-Patch mesh system may be used in a tensionless repair for inguinal hernia. In the modified tensionless technique, cone-shaped preformed plug (Bard PerFix Plug), used as an underlay patch, is placed in the preperitoneal plane, which is assisted by intra-abdominal pressure. This technique provides extended posterior coverage of the defect. However, mesh-specific complications including mesh infection, obstruction, and migration have also been reported (2,3). When the mesh comes into contact with the organs of the digestive tract, rigid adhesions can occur, causing mesh-specific complications. The plug had not invaded the peritoneum and was only wrapped in a fibrous tissue, and the mass effect was situational and was the result of air insufflation during routine colonoscopy. Therefore, a non-deployed mesh mimicked a mass in the wall of the cecum.

In the present case, the mesh plug was misdiagnosed as a cecal SET following inguinal hernia repair. The mesh plug may mimic a SET arising from the cecal wall and must always be considered in the differential diagnosis of cecal SET. A combination of history examination and physical findings as well as imaging studies lead to the correct diagnosis of a mesh plug presenting as a SET in the cecum following inguinal hernia repair.

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