Endoscopic Diagnosis of a Retained Surgical Sponge Following Intra-Abdominal Surgery

Retained surgical sponges can be discovered long after laparotomies, and they may be incidentally discovered many years after an operation. Sometimes they cause some abdominal complaints, and the preoperative diagnosis may be difficult (1). The diagnosis of a retained surgical sponge without radiopaque markers has been made mainly on the basis of sonography and computed tomography (CT) results (2). We report a case of a retained surgical sponge that fistuled into the stomach and appeared endoscopically.

A 38-year-old woman who had surgery for gallstones six months previously was admitted with chief complaints of periumbilical pain, subfebrile temperature, intermittent chills, nausea and epigastric pain which she had for two months prior to admission. Because of the epigastric complaints, on the first day after the admission esophagogastroduodenoscopy was performed on the patient. Endoscopic examination showed a sponge-like foreign body which had eroded into stomach through a fistula located in the prepyloric antrum (Figure 1). Shortly after the endoscopy, abdominal sonography and CT were conducted. Sonography revealed a 7 cm hypoechoic mass adjacent to gallbladder region, and CT scans demonstrated a well defined mass with fluid and soft tissue densities. Laparotomy revealed a hard and inflamed mass that was adherent to the duodenum, colon, stomach, and liver. The mass was 8 cm in diameter, and it had a partly fibrotic wall. After an incision was made in the fibrotic wall, the retained surgical sponge and a stoma between the mass and stomach were found, and the sponge was removed (Figure 2).

Fistulae and perforations of neighboring viscera caused by retained surgical sponges have been previously reported (3,4). The sponge may be extruded into all parts of the intestinal tract, the most frequent site being the ileum or the colon (5). We endoscopically diagnosed a retained intra-abdominal surgical sponge that fistuled into the stomach of a patient with some epigastric complaints who had surgery for gallstones six months previously. It might be a coincidence, but we believe it was an interesting case and could not find a previously published report about the endoscopic diagnosis of a retained intra-abdominal material.

References

1. Williams RJ, Bragg DG, Nelson JM: Gossypiboma. The problem of retained surgical sponge. *Radiology* 1978; 129: 323–326.
2. Kokubo T, Itai Y, Ohtomo K, et al.: Retained surgical sponges: CT and US appearance. *Radiology* 1987; 165: 168.
3. Robinson KB, Levin EJ: Erosion of retained surgical sponges into the intestine. *AJR* 1966; 96: 339–343.
4. Sturdy JH, Baird RM, Gerfin AN: Surgical sponges: a cause of granuloma and adhesion formation. *Ann Surg* 1967; 165: 128–134.
5. Risher WH, Kinom WM: Foreign body in the gastrointestinal tract: intraluminal migration of laparotomy sponge. *South Med J* 1991; 84 (8): 1042–1045.

Figure 1: Endoscopic appearance of the surgical sponge located in the prepyloric antrum.

Figure 2: Appearance of the surgical sponge during and after the operation.

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