

## LETTERS TO THE EDITOR EDİTÖRE MEKTUP

### ***Abdominal gossypiboma: Ultrasonography and Computerized tomography findings***

Abdominal gossypiboma: Ultrasonografi ve bilgisayarlı tomografi bulguları

*To the Editor,*

The mass composed around the cotton matrix (usually a retained surgical sponge) within the body is termed as gossypiboma (1). Because of the variable presentations, the diagnosis is very difficult. Although cottonoids are chemically inert, they can induce a series of inflammatory reactions over time (2). The surrounding exudative reaction causes the formation of sterile pus, along with granulomatous tissue and fibrosis (1, 3-6).

In this report, we describe the ultrasound (US) features of an abdominal gossypiboma in a patient who had undergone cholecystectomy.

A 61-year-old woman with a one-year history of right upper quadrant pain was admitted to the hospital. She had undergone cholecystectomy one year ago. Physical examination revealed fullness in the right upper abdomen. No abnormality was detected on plain abdominal radiograph and routine laboratory tests. Computerized tomography (CT) examination and US were done for further evaluation.

Ultrasound demonstrated a hypoechoic mass just beneath the abdominal wall in the right upper abdomen. Within this structure was a wavy, amorphous, hyperechoic focus with intense posterior acoustic shadowing (Figure 1). Non-contrast images revealed an intermediate to hypodense cystic mass between the abdominal wall and the liver. The lesion contained a hyperdense solid component. Intravenous contrast injection resulted in

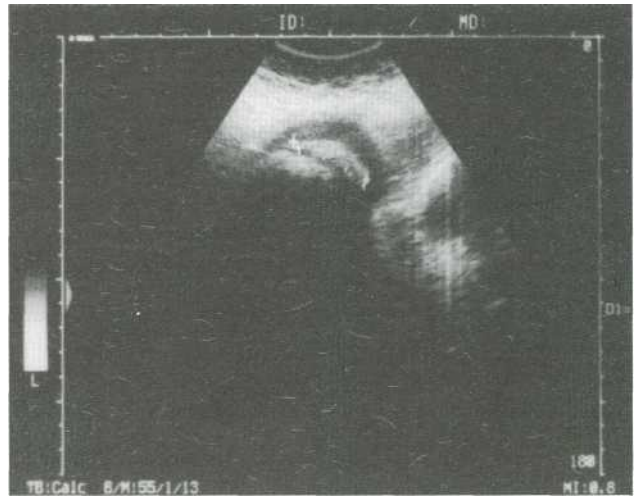


Figure 1. The US scan demonstrated a wavy, amorphous, hyperechoic focus within the hypoechoic mass. The echogenic component with the strong posterior acoustic shadow was due to the retained sponge

marked enhancement of the thin wall surrounding the lesion. The features observed on abdominal CT and US suggested a retained foreign body with pus formation and fibrotic reaction. At laparotomy, encapsulated cystic mass containing surgical sponge was removed.

Modern surgical sponges are usually marked with radiopaque filaments that are easily visible on X-ray examination. In our case, the sponge did not contain a marker.

Our patient's US findings correlated quite well with the pathological features. On US, retained sponges usually appear as echogenic areas with strong acoustic shadows. When there is exudative reaction, the mass appears as a well-defined cystic structure containing a hyperechoic focus.

In previous reports of CT features, gossypibomas are described as well-circumscribed masses with a whirl-like gas collection in the cotton mesh, peripheral curvilinear or internal amorphous calcifications, and a surrounding thick or thin wall composed of fibrotic tissue. The intense contrast enhance-

ment of the surrounding soft tissue is related to fibrosis and granulomatous reaction. On CT, the filament marker typically shows as a curvilinear line of high attenuation within the pseudotumor (3, 5, 6). Our case exhibited none of these typical CT features except for the wall enhancement.

The list of differential diagnoses for these cases includes hematoma, pyogenic abscess, cyst, and tumor (3, 7). We emphasize that gossypiboma should always be kept in mind during investigation of abdominal masses in patients with a history of laparotomy.

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