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Paracardiac Gossypiboma (Textiloma) in 2 Patients

Gossypiboma, also called textiloma, results when a cotton matrix such as a gauze pad or surgical sponge is left in a body cavity after surgery. The diagnosis of gossypiboma can be challenging. In symptomatic patients, operative removal of the pad or sponge is recommended; however, the decision to operate might be less immediately clear in asymptomatic patients. We report the cases of 2 patients in whom we diagnosed paracardiac gossypiboma. In addition, we briefly review other cases and discuss the treatment of asymptomatic patients. (Tex Heart Inst J 2015;42(3):259-61)

The term gossypiboma (textiloma) refers to a mass of cotton matrix inadvertently left behind in a body cavity after surgery. The diagnosis of the condition can be difficult. Symptomatic patients should undergo removal of the foreign body; however, it is sometimes not as clear whether asymptomatic patients should be treated. We discuss the cases of 2 patients who had gossypiboma, and we briefly review previous relevant reports.

Case Reports

Patient 1

A 68-year-old woman was admitted to our outpatient clinic because of decreased exercise capacity and fatigue. She had undergone open mitral valvulotomy consequent to rheumatic mitral disease at 60 years of age. Echocardiograms revealed a mitral valve area of 1.2 cm², mitral regurgitation, and a right atrial mass that was initially interpreted as thrombus (Fig. 1). When the diagnostic images were scrutinized, a whorl near the right atrium was identified as the radiopaque marker of surgical gauze (Fig. 2). We replaced the patient's mitral valve and removed the gauze, which was just outside the right atrium (Fig. 3). The patient had an uneventful recovery and was discharged from the hospital on the 5th postoperative day. The mass was not visible on a postoperative transthoracic echocardiogram (TTE).

Patient 2

A 57-year-old woman was admitted to our outpatient clinic because of back pain and dyspnea. She had undergone aortic valve replacement 2 years earlier. A TTE revealed normal prosthetic valve function and an ascending aortic diameter of 38 mm; however, dilation was observed in the lateral aortic wall. A radiopaque whorl lateral to the aorta was identified as surgical gauze (Figs. 4 and 5). The patient recovered uneventfully from its surgical removal and was discharged from the hospital on the 5th postoperative day.

Discussion

Gossypiboma is most prevalent after abdominal surgery; however, any body cavity can be involved.¹ Patients can be asymptomatic for years, or they can present soon after surgery with an acute or subacute form of the condition.²

Gossypiboma can cause 2 types of pathologic responses: exudative and aseptic fibrous. The exudative form typically occurs early in the postoperative period, after secondary bacterial contamination has led to various fistulas. The aseptic fibrous form usually leads to adhesions, encapsulations, and eventually granuloma formation.³⁻⁵

Diagnosis can be difficult,⁶⁷ because gossypiboma has an inconsistent radiologic appearance that can mimic hematoma, thrombus, or aneurysm. Operative removal of the mass might be the only way to rule out the other possibilities.

Key words: Diagnosis, differential; foreign bodies/ diagnosis/surgery; foreignbody reaction; medical errors/prevention & control; postoperative complications/etiology; reoperation; surgical sponges/adverse effects; time factors; treatment outcome

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Removal of the mass is recommended in symptomatic patients, but what to do in asymptomatic cases can be less immediately clear. The long-term pathologic process can have devastating consequences. In instances of intracavitary retention, emergency surgery might



Fig. 1 Patient 1. Transthoracic echocardiogram (apical 4-chamber view) shows a right atrial mass.



Fig. 2 Patient 1. Radiograph shows a mass adjacent to the right atrium, with a whorl-like radiopaque marker.



Fig. 3 Patient 1. Photograph shows the gauze after its removal.

be necessary years later because of perforation. As one example,⁸ gossypiboma was discovered in a patient's thoracic cavity after 22 years; during that time, it had caused considerable destruction in the neighboring lung tissue, and pneumonectomy was necessary.

In our 2 patients, we intervened surgically. In Patient 1, the decision was easy because of her other surgical indication, valvular disease. In Patient 2, the decision was not as straightforward and was predicated on the undesirable presence of the mass.

Obviously, prevention is best. Counting sponges is one preventive method; however, in a series of 11 cases of gossypiboma,⁹ the initial sponge count was confirmed to be correct in only 8 instances. Accordingly, the sponge-count report should be verified and a routine cavity exploration should be performed before closure. For the health of the patient and because of legal



Fig. 4 Patient 2. Radiograph shows a radiopaque whorl lateral to the aorta.



Fig. 5 Patient 2. Computed tomogram (scout view) shows a radiopaque whorl lateral to the aorta.

implications,¹⁰ we think that every retained sponge or gauze pad in the cardiovascular operating field should be removed as soon as it is discovered.

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