Gossypiboma—Abdominal Textiloma: Report of a Case

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Abstract: The intra-abdominal gossypiboma is an uncommon surgical error. Herein, we report a male patient 48 years old, has been operated twice: the first time for hydatid liver cyst, the second time for abdominal trauma. He was admitted, twelve years after, to the Emergencies Care Unit at Hospital Ibn Tofail (Marrakech) with a chronic evolution of abdominal pain and parietal fistula, through image studies the diagnosis was recurrence of hydatid hepatic cyst. An exploratory laparotomy has shown retained surgical sponge and it was extracted with a good post-surgery evolution.

Key words: Textiloma, retained surgical sponge.

1. Background

Textiloma is defined as a mass inside the body, result of forgotten surgical materials and also denominated as gossypiboma. An incidence of 100 out of 3000 surgeries is estimated, however, due to its medical legal implication this information is not accurately known and the risk factors have been described as emergency interventions, modifications to the surgical techniques and a high body mass index; the symptoms are not specific and the diagnosis is not always easy to make through image studies.

2. Case Report

Male patient, 48 years old, has been operated twice: the first time for hydatid liver cyst (18 years ago), the second time for abdominal trauma (13 years ago). He was admitted, twelve years after, to the Emergencies Care Unit at Hospital Ibn Tofail (Marrakech) with a chronic evolution of abdominal pain and parietal fistula, without other signs. Through image studies, the diagnosis was recurrence of hydatid hepatic cyst in segment VII and VIII. An exploratory laparotomy has shown retained surgical sponge and it was extracted with a good post-surgery evolution.

3. Discussion

Gossypiboma is derived from gossypium (“cotton” in Latin) and boma (“place of concealment” in Swahili). Also known as textiloma or cottonoid, it is a term used to describe a mass in the body that comprises retained surgical sponge and reactive tissue [1]. Retained surgical foreign body is a ubiquitous medical error as long as nonabsorbable materials continue to be used. The most common surgically retained foreign body is the laparotomy sponge. In the available literature, the imaging findings of a gossypiboma can only be found as occasional case reports [2]. The incidence of gossypiboma is difficult to calculate. It varies between 1 in 100 and 1 in 5,000 procedures, because some patients remain asymptomatic and are never discovered. This condition is often underestimated because case numbers are calculated only on the basis of malpractice claims and because the operations that form the denominator for their calculation include large numbers of procedures that are unlikely to result in retained sponges. Gossypibomas are most frequently diagnosed in the intra-abdominal cavity [3] and abdominal sponge is the most common foreign body reported. Risk factors include emergency operations and high body mass index remarkable for both its dramatic decline in incidence over the past century. Gossypibomas may present at any time, from

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a few weeks to several decades after initial surgery. They may present as either of the following syndromes: pseudotumoral, occlusive, or septic entities [4]. Patients generally complain of non-specific abdominal pain, nausea, vomiting, and abdominal distension, rectal bleeding, altered bowel habit, fever, anorexia, weight loss, malabsorption syndrome, or a palpable mass [4]. They might even present with features of severe pain due to peritonitis or obstruction or as external fistulae or non-healing infection of the surgical wound. About a third of gossypiboma patients remain asymptomatic, with the foreign body solely detected on radiography. The most impressive imaging finding of gossypiboma is the curved or banded radio-opaque lines on plain radiograph. The ultrasound feature is usually a well-defined mass containing wavy internal echogenic focus with a hypoechoic rim and a strong posterior shadow [5]. However, this is often misinterpreted due to its clinical rarity. On CT, a gossypiboma may manifest as a cystic lesion with internal spongiform appearance with mottled shadows as bubbles, hyperdense capsule, concentric layering, or mottled mural calcifications. When no radio-opaque marker is seen on X-ray or CT, the characteristic internal structure of the gauze granuloma is best visualized on magnetic resonance imaging. It may appear as a low-signal-intensity lesion on T2-weighted images with wavy, striped or spotted appearance. When the diagnosis of gossypiboma is made, removal of the retained sponge surgically, endoscopically or laparoscopically is recommended to prevent severe complications that may lead to death (15%-22%) or

morbidity. The importance of correct sponge and instrument counts cannot be overemphasized. If a thorough examination does not find the missing item(s), then a radiograph is necessary [6]. Although human errors cannot be completely avoided, continuous medical training and strict adherence to rules of the operation room should reduce the incidence of gossypiboma to a minimum [7].

5. Conclusion

Communication and education of this pathology will make easier a quick clinical suspicion with an opportune diagnosis and adequate treatment.

References

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