

Case Blog

Abdominal Gossypiboma: A Diagnostic Dilemma in Late Postoperative Period

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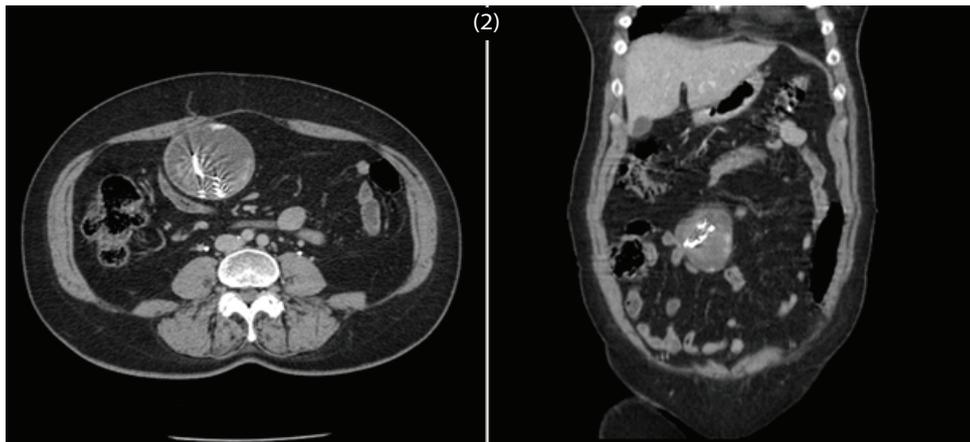


Figure 1: Linear metallic density in the midpart of abdomen is observed.

Figures 2: Abdominal CT scan showed a well-defined mass like structure in RT sided abdominal cavity.

Abstract

We reported a case of gossypiboma in 59-year old woman who presented with vague abdominal pain since her cesarean section and described her plain radiograph and abdominal CT scan.

Keywords: Gossypiboma

Case Report

Introduction

59-year old woman was admitted in our emergency department because of long lasting vague abdominal pain. She had occasionally nausea and vomiting however with no weight loss. Her past medical history was unremarkable except for cesarean

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section performed 15 years ago. On physical examination mild periumbilical tenderness was found and routine lab data showed no abnormality. Plain abdominal radiograph was performed which showed linear metallic density in the midpart of abdomen (Figure 1). Abdominal CT scan showed a well-defined mass like structure in RT sided abdominal cavity with no peripheral fat stranding with metallic artifact within it (Figure 2). Diagnosis of gossypiboma was made preoperatively. Surgery was done which revealed surgical sponge within abdominal cavity. The patient's symptom resolved after surgery. Gossypiboma is a term used for description of any surgical substance remained within the body with retained surgical cotton or sponge as the commonest reported intra-abdominal foreign body. For many years they can be unnoticed until they lead to complications [1].

Gossypiboma is an avoidable condition should be considered in any postoperative patient who presents with unusual manifestation as it can be misdiagnosed and unnecessary procedure may be done [2]. In spite of its rarity in clinical practice in any patient with previous history of laparotomy should be considered as one of differential diagnosis [3]. It can cause significant morbidity or even mortality for patients and most patients with gossypiboma of abdomen are symptomatic and present with nonspecific abdominal pain [4]. Retained surgical sponge or gossypiboma is a serious unusual condition with medicolegal effect that its frequency is difficult to estimate however seems to be 1 in 1000 to 1500 intra-abdominal operations. The gossypiboma even if aseptic can induce foreign body reaction and mimic a soft tissue neoplasm and usually misinterpreted preoperatively due to low clinical and even radiological suspicious [5]. It can be anywhere in the body with intra-abdominal location as the most common site but unusual location such as paraspinal muscle, shoulder and intrathoracic region also have been reported. They usually diagnosed with radiological examination as radio-opaque density within surgical sponge help diagnosis easily however radiolucent density cause dilemma for correct diagnosis. CT scan may be needed especially in chronic presentation as they can present like a soft tissue neoplasm which revealed hypodense structure with peripheral thick rim [6]. Various imaging appearances present depending on time of retention and surgical site. They can be seen as sponge-like appearance due to bacterial overgrowth within surgical sponge and whirl like structure. In MRI, in T2 weighted sequence, folded fabric structure demonstrated. Negative uptake in scintigraphy study help in differentiation of same appearance soft tissue tumors from gossypiboma in equivocal cases [7,8]. Other radiologic characteristics in acute post-operative phase may mimic hematoma, abscess or seroma formation but in chronic phase they may be confused with chronic granulomatous reaction or soft tissue tumors [7]. Sarcoma may arise from gossypiboma in rare frequency when retention time is more than 20 years so it is necessary for careful examination of gossypiboma resected specimen for rule out of coexisting sarcoma [8].

It is preventable event with staff change avoidance during surgery and strict swab count. Minimally invasive procedures also help in decreasing its incidence [9].

Conclusion

Gossypiboma is an avoidable condition that should be considered in differential diagnosis of any patient with previous history of operation with unusual presentation in acute or chronic states.

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