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Case Report

Gossy-pibomas; Concealed Causes of an Acute Abdomen

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ABSTRACT

Our case was a 30-year-old patient who had recently given birth via Caesarean Section two months before reporting to our hospital with pain abdomen as the chief complaint; her systemic examination, less abdominal tenderness and tachycardia, was unremarkable with only slightly raised TLC. The Diagnosis of Gossypiboma was made after a CT scan and laparotomy were done to remove the Gossypiboma with the surrounding fluid sent for culture and sensitivity test. She was kept post-operative on antibiotics and discharged after uneventful recovery.

Keywords: Acute abdomen, Caesarean section, Gossypibomas.

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INTRODUCTION

Gossypiboma is a phenomenon in which foreign bodies are erroneously retained in the body of the patient, especially such foreign bodies which are used to perform the procedure itself. Most common gossypibomas include surgical sponges, gauzes and sometimes instruments themselves).[1] According to a study, the duration in which a case of Gossypiboma ranges from 1 week to 276 months , and although the incidence is less, the mortality and mortality are great. Almost all the imaging modalities play a vital role in reaching a proper diagnosis, with screening done via ultrasonography (USG) and simple X-rays, and MRIs (Magnetic Resonance Imaging) and CT scans (Computed Tomography) are used to reach a definitive diagnosis.[2,3] Gossypiboma should be an important differential in patients with an abdominal mass and has undergone surgery recently.[4]

We report a case of a Post C-section Gossypiboma in a 30-year-old patient post-C-section, done at a different setup, managed at secondary care hospital with early suspicions of retained products of conception and sepsis.

CASE REPORT

Our case was a woman, 30 years of age, presented on January 31, 2022 with a history of Pain Abdomen for the past two months (post-C-section in Nov 2021). The pain was associated with Nausea and Vomiting. She took treatment from multiple hospitals but was not relieved.

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On Examination, pulse 132beats/min, Blood Pressure 90/70mmHg, Afebrile. The abdomen was soft with Generalized tenderness. Bowel sounds are audible. She passed Flatus and stool. Blood complete picture showed Raised TLC 14.4x10^9/L, Hb 9.5g/dL, PT 21/14, APTT 44/34. Ultrasound showed a bizarre-shaped oblong hyperechoic structure with strong posterior acoustic shadowing in the abdomen. Significant surrounding fat strandings and free fluid also. Features were suggestive of Gossypiboma. CT Abdomen revealed internal mottled lucencies with mesenteric oedema and small pockets of free air within the peritoneal cavity (Figure-1).

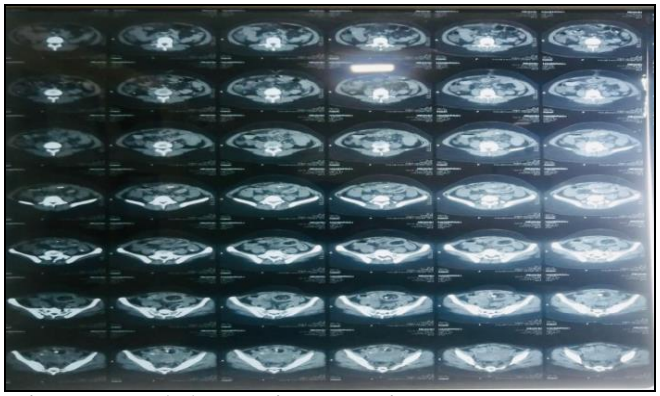

Figure-1: Mottled Lucencies as seen in CT Scan

Radio opaque density was also noted in Gossypiboma. A diagnosis of Gossypiboma post-C-section was made. At Laparotomy, there was significant distention of the small intestine, especially the terminal ileum, where a firm consistency mass was palpated inside the lumen. The surgical gauze was removed by an enterotomy (Figure-2, & 3). Resection and anastomosis of the

terminal ileum of the affected part were done. Adhesionolysis done. Peritoneal fluid/pus was taken for Culture sensitivity. The patient made an uneventful recovery and was discharged after being observed for seven days after the procedure.

Figure-2: Removal of Gossypiboma via Enterotomy

Figure-3: Surgical Guaze retrieved

DISCUSSION

Gossypiboma, otherwise known as retained foreign bodies (RFBs) or sponge, is a crucial topic for debate and discussion, as it ensues embarrassment and Humiliation. Lawsuits are a fairly common outcome of a diagnosis of Gossypiboma. Considering that the cases reported were about one in 1500 abdominal operations.[5] The actual number cannot be ascertained due to less reporting and fear of litigation and malpractice charges.[6] The incidences of gossypibomas are most in emergency surgeries, lack of distinct structural organization of the surgical team itself, changes or swaps in the team of surgeons or nurses during the procedure, sponge or gauze counts being done hastily, unstable patients, obesity in the patients, prolonged operations, inexperienced staff and inadequate/ overburdened staff members.[7]

Retained foreign bodies, especially surgical sponges, act as simulants in two ways; fibrinous aseptic response resulting in foreign body granuloma or exudative reaction forming an abscess.[8,9] The symptoms of the patient depend upon a few points, such as the location of the sponge, dimensions of the swab/sponge and what reactions occur. The presentation is a spectrum, and pain may be the primary symptom, accompanied by swelling or lumpy sensation or be vague and asymptomatic for a lasting period of time. Another common or critical presentation is a Surgical emergency of acute or subacute Intestinal Obstruction. Fistula formation, perforation or extrusion through the anus are rare. The presentation in our patient was vague symptoms for two months resulting in an exudative reaction (abscess formation).[9]

As far as Radiological investigations are concerned, they are sensitive in picking up Gossypiboma especially keeping the past surgical history in mind. However, their scope is often limited, for not all sponges have a radiological marker, which makes the diagnosis easier. Structural material, especially cotton in abdominal sponges, may manipulate as a hematoma, granuloma formation, an abscess, a cyst or neoplasm.[9] In our case, a proper diagnosis was reached after radiological investigations. It requires a high index of suspicion in such cases.

Prevention of such cases is very important and can save a patient from a deadly dilemma. It can be easily done by keeping a record of the sponges pack during Surgery. Furthermore, gauze/sponge count should be checked and ensured before closing the cavity. Due to such cases, it is strongly recommended that radiopaque marker sponges should only be used. Technologies such as Radiofrequency chips can decrease the frequency of such cases by using barcode scanners; such technologies are new and phased in across multiple centres.[9,10]

The definitive treatment of Gossypiboma is to remove it by either a previous caesarian scar or by midline incision.[9] However, due to chronicity and abscess formation, as in this case, dense adhesions usually form around Gossypiboma. It then leads to adhesiolysis, enterotomy, sponge removal, small bowel resection, and anastomosis.

Conflict of Interest: None.

Author's Contribution

TJ:, MBM & HA: Conception, study design, drafting the manuscript, approval of the final version to be published.

SSH:, SBR & KH: Data acquisition, drafting the manuscript, critical review, approval of the final version to be published.

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