ORIGINAL RESEARCH PAPER

General Surgery

KEY WORDS:
Gossypiboma,cotton pad,gauze,sponge,Intestinal obstruction,Transmural migration.

AN UNUSUAL CASE OF INTESTINAL OBSTRUCTION – GOSSYPIBOMA MIMICKING A SMALL BOWEL MALIGNANCY

Dr. Thamilkkovan.A* Postgraduate, Institute of General Surgery,Madras Medical College and Rajiv Gandhi Government General Hospital, Chennai – 3.*Corresponding Author

Dr. Sabarigirieasen.M Assistant Professor,Institute of General Surgery,Madras Medical College and Rajiv Gandhi Government General Hospital, Chennai – 3.

Prof. Kannan. R Director, Institute of General Surgery,Madras Medical College and Rajiv Gandhi Government General Hospital, Chennai – 3.

Prof. Vijayalakshmi. V Institute of General Surgery,Madras Medical College and Rajiv Gandhi Government General Hospital, Chennai – 3.

ABSTRACT

Gossypiboma refers to a mass of cotton material, usually,gauze,sponges inadvertently left inside the body cavity at the end of a surgical operation.This case is an unusual case of small bowel obstruction wherein a cotton pad left inside (gossypiboma) the abdomen has transmurally migrated into the lumen of the small bowel and presented 10 years later with features of a mass mimicking a small bowel malignancy and intestinal obstruction.
A 60 yr old female came to emergency with clinical features suggestive of small bowel obstruction The patient had undergone Total Abdominal Hysterectomy and Bisalphingo Oophorectomy 10 yrs ago at a nearby hospital. On clinical examination ,A mass of size 7x5 cm is palpable in the umbilical region and hypogastrium, tender ,well defined borders, freely mobile,firm to hard in consistency, moves with respiration, no guarding / rigidity. X ray abdomen erect showed signs of intestinal obstruction and CECT abdomen/pelvis taken showed a spongiform mass with peripheral calcification. Emergency laparotomy done. A clump of small bowel containing a foreign body (gossypiboma) inside the lumen is seen. Enterotomy is done and the cotton gauze pad is removed in toto. The clump of small bowel is resected and end to end anastomosis is done.Postop events uneventful.

CASE PRESENTATION :

A 60 yr old female came to emergency with c/o Abdominal pain past 5 days , nausea ,Vomitting 4 – 6 episodes past 3 days, h/o Obstipation past 1 day.The patient gives h/o similar episodes in the past and h/o ball rolling movements after taking food for the past 6 months.The patientgave a past h/o Total Abdominal Hysterectomy and Bisalphingo Oophorectomy done for Dysfunctional uterine bleeding 10 yrs ago at a nearby hospital.

P/A - abdomen distended, pfannansteil scar + , no VGP/VIP, a mass of size 7x5 cm is palpable in the umbilical region and hypogastrium, tender ,well defined borders, firm to hard in consistency, surface smooth, freely mobile ,plane intrabdominal, moves with respiration, no guarding / rigidity, dullness + over the mass, bowel sounds increased, P/R normal fecal staining .

X ray abdomen erect showed signs of intestinal obstruction and CECT abdomen/pelvis taken showed a spongiform mass with peripheral calcification and a loop of small bowel adherent to it and suggested a possibility of Gossypiboma Emergency laparotomy done. A clump of small bowel with dense adhesions is seen containing a foreign body (gossypiboma) inside the lumen,about 100 cm proximal to the ileocecal junction The bowel loops cannot be separated.Hence, Enterotomy is done and The cotton gauze pad is removed in toto. The clump of densely adherent small bowel is resected out and end to end anastomosis is done.

Post op the patient is stable. After starting orals on POD 4, the patient is discharged on POD 7.

DISCUSSION

Gossypiboma refers to a mass of cotton material, usually, gauze,sponges inadvertently left iside the body cavity at the end of a surgical operation.The word gossypiboma derives from two sources:the latin word "gossypium" meaning textile or cotton, and the Swahili word "boma" meaning place of concealment.It is also known as Textiloma and Gauzoma.

Gossypiboma can occur in any type of surgeries. viz intrathoracic,intraspinal,neurological,orthopaedic but the most common is after intraabdominal or pelvic surgery.It has been reported to occur in 100 to 5000 of all surgical operations and 1 in 1000 for intra abdominal operations. However there is a high degree of underreporting due to fear of litigation

A retained piece of cotton material evokes two different types of reaction.

- **Exudative reaction** which leads to the formation of abscesses,
- **Fibrotic reaction** which leads to adhesions and mass lesion
- Intramural migration of a sponge may occur without any opening to show its point of entry during re-exploration. If it can negotiate the ileo-caecal valve it will be passed out during defaecation; if not it may cause intestinal obstruction, malabsorption or haemorrhage.
- Fistulisation may also occur leading to enterocutaneous fistula

INVESTIGATIONS

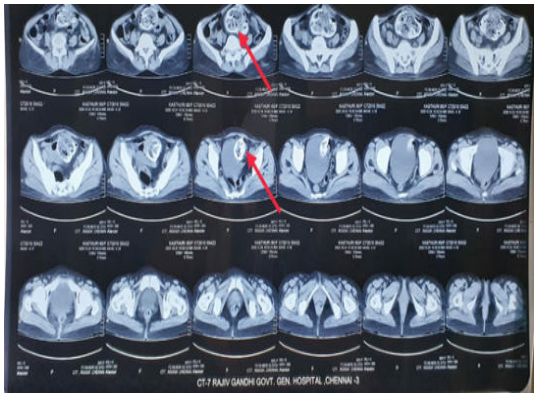
Plain and contrast CT abdomen and pelvis will show a spongiform mass with calcification suggestive of gossypiboma and associated complications like abscess, fistula, features of obstruction, etc

TREATMENT

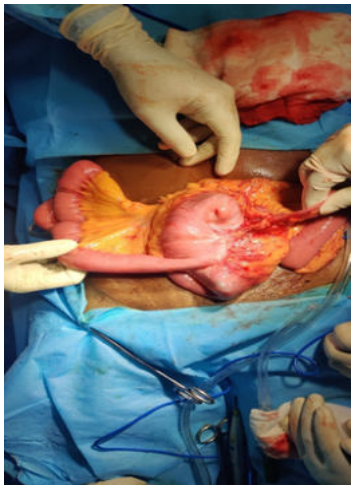
The best treatment is surgical exploration.Wherever possible, minimally invasive procedures like percutaneous, endoscopic and laparoscopic retrieval can be tried while laparotomy is done in difficult and complicated cases.

PREVENTION

- An operating surgeon should take care to ensure that the counts are right and the checklist is verified before stepping out of the theatres.
- Use of gauzes with radiopaque lines or tailing the cotton pads are also helpful.

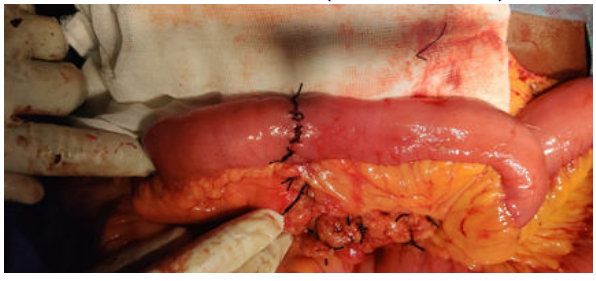


PIC 1 CT ABDOMEN AND PELVIS showing spongiform mass with calcification



Pic 2 CLUMP OF SMALL BOWEL mimicking a Tumour

Pic 3 COTTON PAD REMOVED (GOSSYPIBOMA)



Pic 4 RESECTION AND ANASTOMOSIS OF BOWEL

CONCLUSION

Cases of gossypiboma not only result in high morbidity to the patients but also cause severe mental agony and stress to the surgeon. They also pose a serious threat to a surgeon's practice by bringing in medicolegal issues.Hence a surgeon should take utmost care to prevent the incidence of gossypiboma to safeguard both himself and the patient .

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