COMPARATIVE EVALUATION OF USG & CT IN GOSSYPIBOMA AND ITS RARE COMPLICATION

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ABSTRACT: Gossypiboma or textiloma is used to describe a retained surgical swab in the body after an operation. Inadvertent retention of a foreign body in the abdomen often requires another surgery. This increases morbidity and mortality of the patient, cost of treatment, and medicolegal problems

KEYWORDS: Gossypiboma, fistulous, episodic, acoustic, Hemorrhage, Encapsulation, Laprotomy, Intraluminal.

INTRODUCTION: As a mass within a patient's body comprising of non-absorbable surgical material with a cotton matrix surrounded by a foreign body granuloma.¹ The incidence is found to be one in 3000 to 5000 abdominal operations. The origin of "Gossypiboma" is from the Latin word– Gossypium (Cotton) and Swahili word boma (place of Concealment). The first case of gossypiboma was reported by Wilson in 1884.^{2,3}

AIMS & OBJECTIVES: To illustrate the spectrum of USG & CT appearances of Gossypiboma.

CASE SERIES:

CASE1: A Female of 25 years old female c/o Pelvic pain & serous Discharge, H/O - LSCS 2 months back, came for USG & CT in our college. Diagnosed as Gossypiboma in pelvic cavity with fistulous tract & confirmed by Surgery.

Case 2: A Female of 32 yrs old c/o- Pain abdomen in rt lumbar region- 20 days, non-passing of faeces 3days & episodic vomiting-4 days back. H/o- LSCS & BLTL 4 months back, referred to PMCH for USG & CT & diagnosed as Intraluminal Gossypiboma (rare complication) in Terminal Ileum causing Intestinal Obstruction & removed surgically.

IMAGING FINDINGS:

USG:

1. Hyperechogenic image with posterior acoustic shadowing (CASE – 2).
2. Well defined mass with cystic contents and echogenic, undulated internal structures.
3. Non-specific finding of complex and/or hypoechoic mass. Invariably, internal vascular flow is absent at Doppler study.

CT: CT is the technique of choice for detecting gossypibomas and possible complications. A

4. Mass with well-defined contours, with soft tissues density, high or even mixed densities, sometimes containing air bubbles and high density capsule that may present enhancement in the post-contrast phase.

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DISCUSSION: Gossypiboma, retained surgical sponge although uncommon is an underestimated and under-reported condition. There has been a recent increase in recognition. The medico legal consequences of gossypiboma are significant.

COMPLICATIONS: While the Gossypiboma remains in the body, extrusion of the gauze can occur externally through a fistulous track or internally into the rectum, vagina, bladder, or intestinal lumen. Either by fistulizing to a lumen or through direct migration, it can cause **INTESTINAL OBSTRUCTION** (CASE 2), Mal absorption, and Gastrointestinal Hemorrhage. It may be associated with **ANGIOSARCOMA**. Acute presentations generally follow a septic course resulting in abscess or Granuloma formation. Delayed presentations may follow months or years after original surgery, with **ADHESION** formation and Encapsulation (OUR CASE 2).

CASE 1:

Case 1: NCCT - A mass with well-defined contours, with soft tissues density, mixed densities, containing air bubbles and high density capsule in Pelvic Cavity with Fistulous tract.

CASE 1:

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Case 1: CECT - Foreign Body with Enhancing Capsule in Pelvic Cavity and Fistulous tract.

Case 2: USG: Hyperechogenic image with posterior acoustic shadowing S/O-Foreign Body in Abdominal Cavity.

CASE 2

NCCT of Case 2: Intraluminal Foreign Body Causing dilated small -bowel loops.

OPERATIVE FINDINGS OF CASE 2: Emergency Laprotomy was done which revealed gut was found to be adhered. During Adhesiolysis a Rent was found in Jejunum, about 2 feet distal to DJ Flexure. A FOREIGN BODY was palpable in the gut lumen in terminal ileum that is delivered through rent in jejunum.

FIG: Intraluminal Gossypiboma in 34 years female Delivered through rent in jejunum

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FIG: Intraluminal Gossypiboma in 34 years

Old female after laparotomy.

CONCLUSION: The diagnosis of a gossypiboma is not often easy, and delayed diagnosis can be problematic. Awareness of the typical radiologic appearances is critical to the diagnosis of retained surgical sponges or swabs. Inadvertently retained sponges are often clinically unsuspected and may be first recognized on imaging.

REFERENCES:

1. Zbar AP, Agrawal A, Saeedi IT, et al. Gossypiboma revisited: a case report and review of the literature. R Coll Surg Edinb 1998; 43: 417–418.
2. Kim HS, Chung TS, Suh SH, Kim SY (April 2007). "MR imaging findings of paravertebral gossypiboma". AJNR Am J Neuroradiol 28 (4): 709–13. PMID.
3. Lauwers RP, Van Hee RH, Intraperitoneal gossypibomas: the need to count sponges. World J Surg 2000; 24: 521–527.
4. O'Connor AR, Coakley FV, Meng MV, et al. Imaging of retained surgical sponges in the abdomen and pelvis. AJR Am J Roentgenol. 2003; 180: 481-9.

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