

# GOSSYPIBOMA: A SURGEON'S EPHIALTES AND AN INADVERTENT SOUVENIR FOR THE PATIENT

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### Introduction:

Gossypiboma, a retained foreign object in the abdominal cavity left accidentally during a surgical procedure that can be asymptomatic or can have variable presentations. Surgical sponges form the majority with a rate of 68%. It is a rare but universal event, which is usually underreported for medico-legal reasons. The reported estimate of retained surgical items is 1.32 per 10, 000 procedures and 0.3 to 1% of abdominal operations.<sup>(1)</sup>

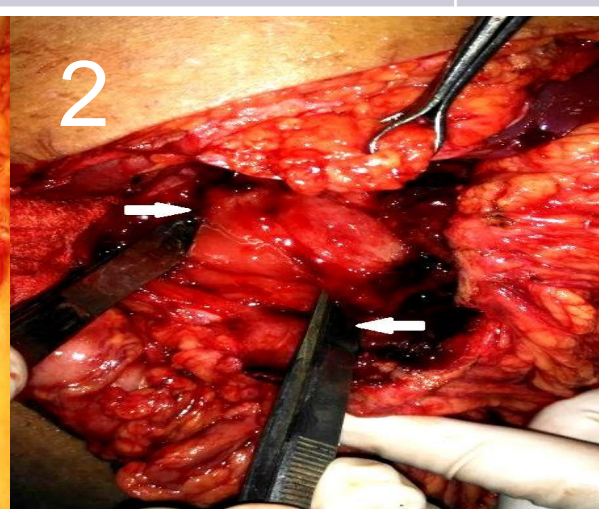
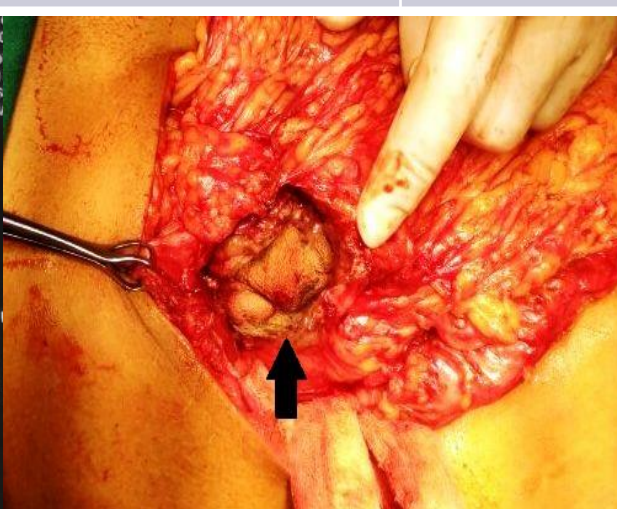
### Discussion:

- According to Wan *et al.* Gossypibomas were most commonly found in the abdomen (56%), pelvis (18%), and thorax (11%).<sup>(2)</sup>
- *NEJM* identified 8 risk factors (**emergency operation**, **unexpected change in operation**, more than one surgical team involved, change in nursing staff during procedure, **body mass index (BMI)**, volume of blood loss, female sex, and surgical counts).

### Conclusion:

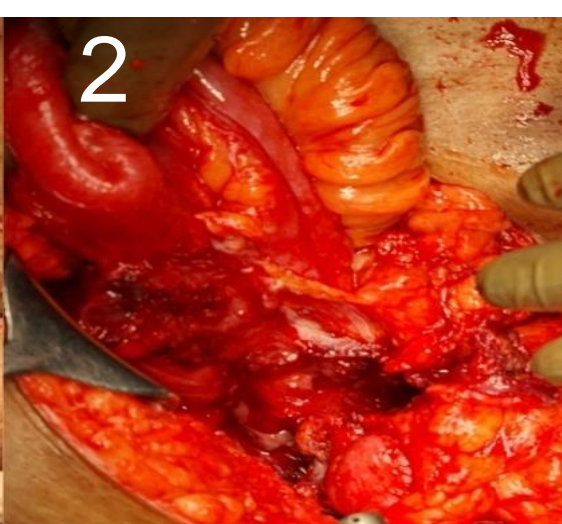
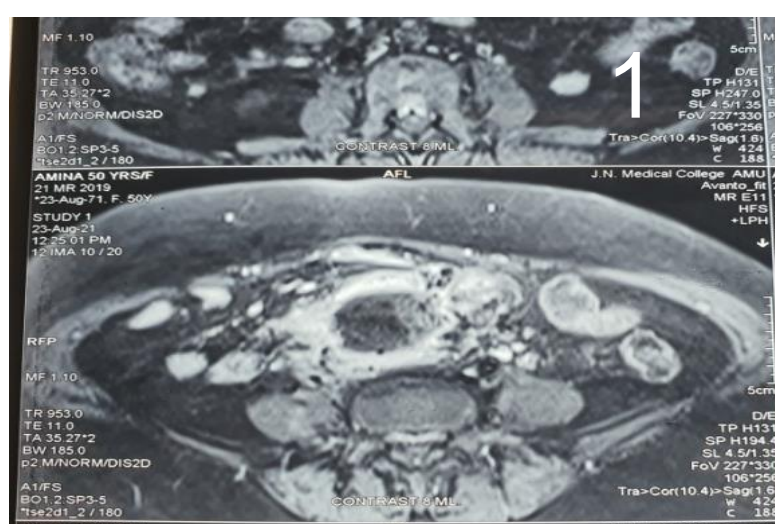
1. The diagnosis of gossypiboma is not often easy, and delayed detection can be problematic. Awareness of the typical radiologic appearances is critical to the diagnosis of retained surgical sponges or swabs.
2. Gossypiboma, in the **doctrine of res ipsa loquitur**, proves that the surgeon is negligent
3. The National Quality Forum of the USA and the Health Department of United Kingdom have declared that the presence of a retained surgical sponge is a **"never event"**.
4. **WHO Surgical Safety Checklist** should be part of institutional policy and operating protocol.
5. The association of registered nurse of USA recommends that counts should be performed at various phases during surgery. This includes prior to the start of any procedure, at the time of addition of a new item, prior to closure of a cavity within a cavity, at the time of closure of incision and at skin closure.

| Chief complaints   | Examination  | Imaging  | Intra-operative   | Management                                 |
|--|--|--|---|--|
| 1. 55yr female with <b>dull aching pain and intermittent vomiting</b> since 4 months. ( History of Open cholecystectomy 5 months back) | Fullness in right hypochondrium with mild tenderness. Subcostal scar present | <b>CECT Abdomen:</b> Walled off lesion with admixed air and soft tissue compressing second part of duodenum with luminal narrowing | A sponge was embedded in the first part of duodenum with transected gastro-duodenal junction. | <b>Billroth I with Feeding Jejunostomy</b> |



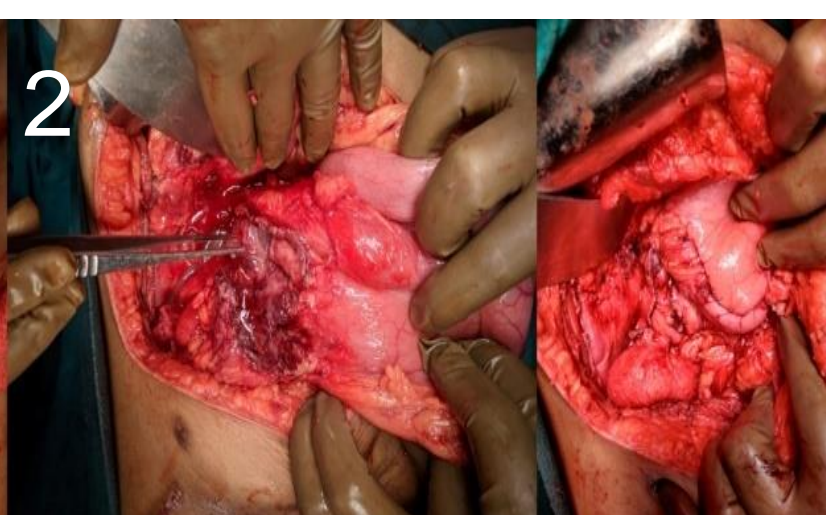
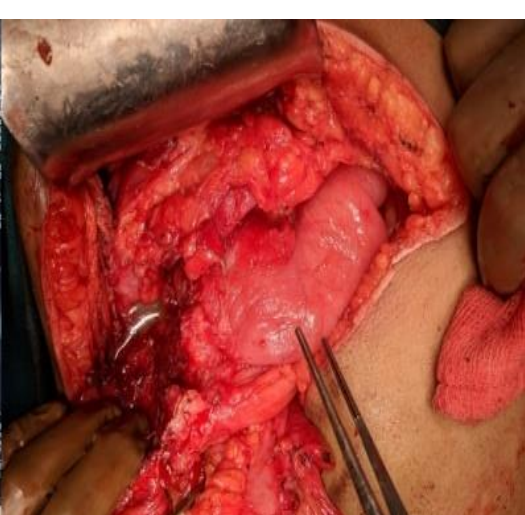
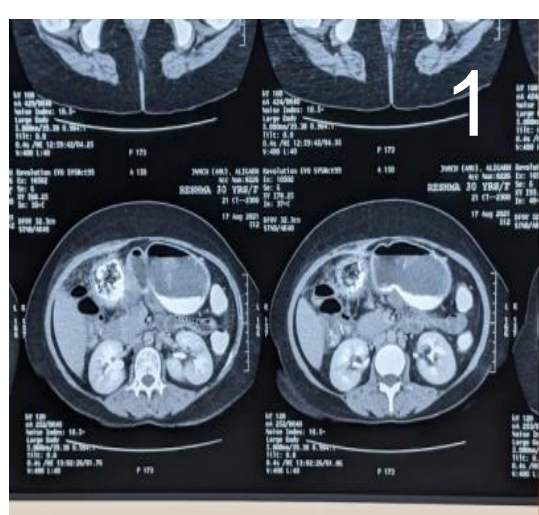
1. Well defined walled off lesion with admixed air and soft tissue particle.  
2. Disrupted gastroduodenal junction

|   |  |   |  |   |
|---|--|---|--|---|
| 2. 42yr female with <b>colicky pain abdomen and bleeding per rectum</b> since 3 weeks. ( History of open abdominal hysterectomy 6 months back ) | Infraumbilical scar mark with tenderness in the region | <b>USG Abdomen:</b> Thickened sigmoid wall with free fluid in pelvis.<br><b>CECT Abdomen:</b> Cystic lesion of 3x4 cm with internal spongiform appearance abutting sigmoid colon and surrounded by omentum. | Sponge was present in pelvis with blowout of rectosigmoid junction | <b>Rectosigmoidectomy with proximal ileostomy</b> |
|---|--|---|--|---|



1. Well defined soft tissue mass with internal high density area.  
2. Disrupted rectosigmoid junction.

|  |   |   |  |  |
|--|---|---|--|--|
| 3. 43yr female with <b>colicky pain abdomen and decreased appetite</b> since 3 months. ( History of open cholecystectomy 4 months back ) | Subcostal scar present With mild tenderness | <b>CECT Abdomen:</b> Heterogenous cystic lesion in right upper quadrant | Mass found between stomach and duodenum with necrotic tissue and sponge causing disruption of anterior wall of stomach | <b>Billroth II with Gastro-Jejunostomy</b> |
|--|---|---|--|--|



1. Heterogeneous cystic soft tissue mass in the right upper quadrant.  
2. Disrupted gastroduodenal junction.

1. M. Ezzedien Rabie, Mohammad Hassan Hosni, Alaa Al Safty, Manea Al Jarallah, Fadel Hussain Ghaleb, Gossypiboma revisited: A never ending issue, International Journal of Surgery Case Reports, Volume 19,2016,Pages 87-91,ISSN 2210-2612.  
 2. Hempel S, Maggard-Gibbons M, Nguyen DK, Dawes AJ, Miake-Lye I, Beroes JM, et al. Wrong-site surgery, retained surgical, items, and surgical fires a systematic review of surgical never events. JAMA Surg. 2015;150(8):796-805.