

# A rare complication of abdominal surgery in a patient injured in war: Gossypiboma in a child refugee after war surgery

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## ABSTRACT

Gossypiboma is a term used for a forgotten cotton sponge or gauze in the body. Gossypibomas may be fistulae from the peritoneal cavity to the gastrointestinal tract or may be extruded to the urinary bladder, intestines and skin. Intestinal obstruction and perforation may occur.

In this case we present a four years old war victim boy complicated with a huge gossypiboma. He applied to our clinic with intestinal obstruction. Clinic investigations showed that 11x4 cm sized mass presented on the left upper side of the abdomen. While surgical operation, a gastro-ileo-colic fistula was detected due to a foreign body. After all approaches he survived with no complication.

Forgetting a foreign object in human body by surgical operations is a very worrying situation for surgeons, although it is very rare. Gossypiboma should be kept in mind especially in the cases of refugees and war victims who went under surgery with increased stress due to war conditions.

**Key Words:** Gossypiboma, war, surgery

## Introduction

Gossypiboma is derived from the Latin term gossypium (cotton) and the Swahili word 'boma (hiding place)' (1), although the exactity is unknown, it is reported as one in 1,000 to 10,000 operations (1,2). It can be seen immediately after surgery as infection and fever or can be seen as a mortal mass in months and years. War surgery is often performed under intense stress in unfavorable conditions so various complications can be seen. In this case; a 4-year-old male patient who was followed up with ileus condition after war surgery which gossypiboma was found during our recovery operation is presented with radiological findings.

## Case Report

A 4-year-old male patient refugee to our country was operated in his own country under urgent conditions in a tent operating room due to shrapnel stabbing in abdominal region due to bombed car explosion about 4 months ago. The patient was followed up conservatively in our clinic due to intestinal obstruction and was orally fed and gas-stool discharge was present. Sudden abdominal distension and

vomiting were observed and after ultrasonographic imaging abscess appearance was found around the spleen. Contrast-enhanced abdominal CT was also performed; the lesion in size of approximately 11x4 cm with a slightly contrasting capsule containing diffuse airflows and hyperdense areas compatible with radiopaque material fistulised with a gastric fundus, splenic flexure and small intestine with a large mouth mass was observed. spleen was displaced by mass to the medial side (figure 1, 2, 3).

In the operation, a gastro-ileo-colic fistula was detected when one compress gauze and 25cc puss wrapped with fibrotic omentum extracted in the left upper quadrant. 13 cm of antrum was debrided and anastomosed, ileal and colonic resection- anastomosis was completed. The patient survived without any complication.

## Discussion

Gossypiboma is a term used for a forgotten cotton sponge or gauze in the body (1-3). The exact number of cases is unknown as there are very few reported cases due to medicolegal reasons. Foreign objects such as gauze, bumpers, pads, needles, forceps are



Fig. 1. x-ray



Fig. 2. ct scan shows gossypiboma

often forgotten (1-3).

Gossypiboma pathologically may result with inflammation and aseptic fibrinotic response as adhesion, encapsulation and granulation. It may also cause an exudative reaction with cyst or abscess formation (1,2). The fibrinous response can usually occur with palpable mass without clinical complaints, but it may also exert as fever and pain which are early symptoms of exudative form (1-3). Gossypiomias may



Fig. 3. CT scan shows colonic connection

be fistulae from the peritoneal cavity to the gastrointestinal tract or may be extracted to the urinary bladder, intestines and skin. Intestinal obstruction and perforation may occur (1-4). It may also develop gastro-ileo-colic fistula and granulomatous peritonitis as well as in our case (1-3). Cysts and tumor form may be seen in ultrasonography and computerized tomography. Surgical approach should be planned according to various complications.

Diagnosis of gossypiboma is usually delayed because it does not come to mind as we experienced in our case. It should be suspected in patients with any surgical history, especially those who have been under surgery in war conditions. Gossypiboma can be diagnosed only with suspicion and with the support of radiological modalities. Suspicion and early diagnosis would reduce morbidity and mortality in such dramatic events.

Forgetting a foreign object in human body by surgical operations is a very worrying situation for surgeons, although it is very rare. Gossypiboma should be kept in mind especially in the cases of refugees and war victims who went under surgery with increased stress due to war conditions.

## References

1. Sivrikozon N, Karaarslan S, Buğdaycı MH, Çökmez A, Solak A. Gastrointestinal Stromal Tümörü Taklit Eden Gossypiboma (Tekstiloma): Olgu Sunumu. Turkish Journal of Pathology, 2016; 32: 1.
2. Yamamura N, Nakajima K, Takahashi T, et al. Intra-abdominal textiloma. A retained surgical sponge mimicking a gastric gastrointestinal stromal tumor: report of a case. Surgery today, 2008; 6: 552-554.

3. Inci MF, Özkan F, Okumuş M, Köylü A, Yüksel M. Çok nadir bir akut batın nedeni: Gossipiboma. Dicle Tıp Dergisi 2012; 39: 3.
4. Yeh CC, Kuo YL, Liu HS, et al. Gossypiboma mimicking an ovarian tumor in a young woman

with a history of ovarian teratoma. Taiwanese Journal of Obstetrics and Gynecology 2010; 2: 225-227.