

# Foxing Retained Intraabdominal Foreign Body After Surgery: A Nightmare For The Surgeon

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## Abstract

Mere suspicion of a retained intraabdominal foreign body after surgery upsets the patient and the surgeon particularly in this consumer act era. We report a case history of 4½ year male child in whom clinical and radiological parameters lead to high index of suspicion for a retained foreign body in right hypochondrium following surgery for liver injury. But on reexploration it was found to be collection of pus, air and necrotic liver tissue between superior surface of right lobe of liver and right hemidiaphragm which was mimicking retained foreign body.

## INTRODUCTION

Foreign bodies retained in the peritoneal cavity after surgery are rarely documented owing to medical, legal and other reasons. Each such incidence acquires major importance because of excessive media type nowadays which can jeopardize the reputation of a surgeon amongst his professional colleagues and public at large. What happens as in the present case when there is reversal of events i.e all clinical and radiological features points toward the suspicion of retained intraabdominal foreign body but on reoperation no foreign body is found. This case is being reported to emphasize the fact that even when there is high index of suspicion for a retained intraabdominal foreign body, the reoperation may be carried out by explaining the indication of resurgery different rather than retained foreign body, as incisional hernia in the present case, to avoid unnecessary embarrassment.

## CASE REPORT

A 4½ years old male child was operated one month back for blunt trauma abdomen. On exploration multiple deep lacerations were found in right lobe of the liver. His immediate post-operative period was uneventful but two months after surgery child started having fever, pain abdomen and nonbilious vomiting. On examination child was anicteric, febrile with incisional hernia on medial half of supraumbilical transverse incision. The patient was investigated which revealed hemoglobin 9.5 gm%, total leucocyte count 10500/ mm<sup>3</sup>, polymorphs comprising 65% and ESR 15mm by Wintrobe's method. His peripheral blood

film for malarial parasite was negative and toxic granules were absent. His liver profile was normal. X-ray chest and abdomen showed an ill-defined focus measuring approximately 5x4 cm consisting of patchy hypodensity similar to that of lung in right hypochondrium with raised dome of right hemidiaphragm (fig.1).

## Figure 1

Figure 1: X-ray abdomen showing hypochoic lesion in Rt. Upper abdomen



Sonography of abdomen revealed a collection of varying echogenicity below right dome of diaphragm and suggested

presence of a fabric foreign body (gauze piece). C.T Scan abdomen was done which revealed poorly enhancing well defined and ill margined mass lesion of soft tissue density measuring approx. 4.5 x 5 x 7.3 cms in right hypochondrium with scattered foci of significant air within it (Fig – II).

### Figure 2

Figure 2: C.T abdomen showing soft tissue density with scattered foci of air within it.



On C.T & USG findings a possibility of foreign body granuloma was kept. This child was also having incisional hernia and parents were explained about reoperation for repair of hernia. On reexploration by the same transverse supraumbilical incision there was loculated necrotic liver tissue (confirmed by histopathological examination) surrounded by air, pus and superior surface of liver attached to dome of diaphragm to form a rounded pocket. Anatomical repair of incision hernia was also done. The child remained well in postoperative period was discharged on tenth postoperative day.

### DISCUSSION

Clinicians frequently encounter patients with a wide spectrum of complications in the post-operative period following intra-abdominal operations. These include recurrent pain abdomen, vomiting, fever, distension

abdomen and even incisional hernia. These are attributed to intra-abdominal collection, abscess, adhesions and rarely retained intra-abdominal foreign bodies. Among retained foreign bodies, a surgical gauze or sponge constitutes the most frequently encountered object because of its common usage, small size and amorphous structure. <sup>2</sup> The usual manifestations of the foreign body left accidentally are abscess, chronic fistula, obstruction, fever, vomiting etc in the early postoperative period. <sup>3</sup>

Various reports in literature describe the radiologic findings of the retained gauze or sponge <sup>4,5</sup>. Although typical spongiform pattern with gas bubbles is most characteristic CT Sign for retained surgical sponges another sign associated with the condition is an inhomogeneously dense mass with a capsule that shows marked enhancement after administration of contrast material. In the present case CT picture resemble that of retained gauze because of loculated air between the right hemidiaphragm and superior surface of liver with necrotic material within it. In conclusion retained foreign body can be ascribed to various postoperative complications however in rare cases like present one when clinical and radiological parameters lead to presence of retained foreign body it may not turned out to be same on reoperations.

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