



ORIGINAL RESEARCH PAPER

General Surgery

LAPAROSCOPIC RETRIEVAL OF INTRA ABDOMINAL FOREIGN BODY IN A HOSTILE ABDOMEN

KEY WORDS: Foreign body; Safety pin; Laparoscopy

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ABSTRACT

Background: Ingestion of sewing needles is fairly common in daily emergency medical practice, but repetitive self-insertion of safety pin through the abdominal wall is a rare condition.

Objective: This case is illustrated to point that in patients with self-insertion of a foreign body through the abdominal wall, laparoscopic approach should be considered with the advantage of magnifying effect and improved postoperative clinical outcomes.

Case: In the present case, one intraperitoneal, non-ingested, forcefully inserted safety pin was managed laparoscopically. The clinical presentation and laparoscopic technique were discussed under a review of recent literature.

Conclusion: Laparoscopic exploration has the advantage of magnified sight, which can be helpful in finding non-localized, intra-abdominal foreign bodies, when the object is stuck in the omentum.

Introduction

There are several intraperitoneal foreign bodies and a wide spectrum of presentations reported in the literature. Foreign bodies may reach the intraperitoneal space via mouth, anus, urogenital tract, or percutaneously. This situation usually occurs accidentally or, rarely, as a result of deliberate self-harm. The majority of such cases occurs in children and mentally challenged patients. Clinical presentation can vary from asymptomatic to acute abdominal pain with an intra-abdominal abscess. We present the case of a mentally unsound woman with one intraperitoneal foreign body as a result of deliberate self-harm. The laparoscopic approach for non-localized intraperitoneal safety pin was discussed.

Case Presentation

A 31-year-old woman with known psychiatric illness was referred to our Department with complaints of self inflicted foreign body (safety pin) insertion to the abdomen by repeated episodes of scratching the abdominal wall , with history of abdominal pain - insidious in onset , intermittent , non radiating , no aggravating and relieving factors with no history of vomiting or abdomen distension or fever. Her past medical history revealed several admissions to the emergency department with history of similar foreign body (safety pin) insertion to the abdomen (past 8 times) , 5times foreign was present in the abdominal wall and was removed under local exploration , 3 times was intra-peritoneal and laparotomy and foreign body retrieval was done. Physical examination showed no peritoneal irritation, abdomen soft and bowel movements were normal. The abdominal x-ray demonstrated thin, radiopaque object in the right iliac fossa region. CT abdomen revealed evidence of intraperitoneal foreign body above the ascending colon. Later the decision was made to attempt a diagnostic laparoscopy and if it is possible a laparoscopic foreign body retrieval.

To easily reach the intraperitoneal foreign body, two 10 mm and two 5 mm trocar were atypically placed, a 30 degree camera was used. Dense adhesions were found beneath the laparotomy scar site, safety pin was found below the inferior border of liver surface, where it was stuck in the omentum and was carefully removed.

The postoperative course was uneventful and the patient was discharged on postoperative day 5 and referred to institute of

mental health. No complications or complaints were observed by the 1 month follow-up examination.

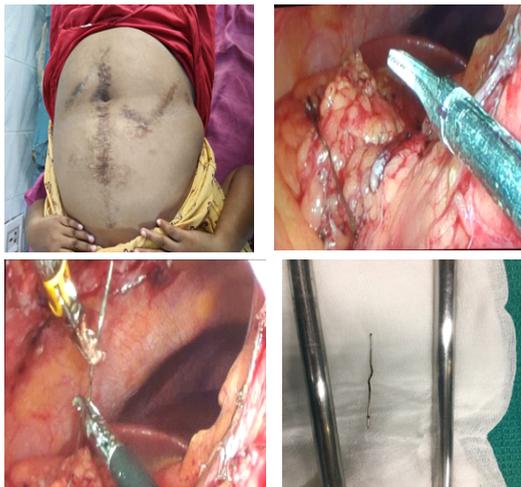
DISCUSSION

Ingested foreign bodies easily transit through the gastrointestinal tract. Foreign bodies localized in the digestive tract may pass uneventfully with feces within 4–6 days. But, predicting the route and location of an intraperitoneal needle is difficult. In less than 1% of patients does the sharp object perforate the gastrointestinal wall and migrate to the intraperitoneal area, or rarely a sharp object can cause an impalement injury in the intraabdominal organs through the abdominal wall. Also, there are two published cases about the intraperitoneal migration of accidentally inserted sewing needles: one penetrated to the stomach and diaphragm in a 10-month-old male infant through the posterior abdominal wall, and the other penetrated through the lateral abdominal wall of a 13-year-old boy without any organ injury. A literature review has shown that, self-ingested intraperitoneal foreign body cases have an incidental route, and two of three published cases described an associated organ injury. Additionally, non-ingested intraperitoneal foreign bodies may result in chronic abdominal pain. In this case no visceral organ injury was noted.

In a case of not-localized intraperitoneal foreign body, the patient can be an appropriate candidate for open surgery, or in selected patients a laparoscopic approach may be preferable. In the present case, one intraperitoneal, non-ingested, forcefully inserted and not-precisely localized safety pin was managed laparoscopically. This case is interesting by, no intra-abdominal organ injury despite the migration route, mechanism and used technique to facilitate needle removal. Sociocultural factors or co-existing psychiatric disorders of the patients may result in different clinical manifestations and this may result in some challenges in daily emergency practice.

Conclusion:-

In our opinion, appropriate radiological evaluation guided laparoscopic exploration has the advantage of magnified sight, which can be helpful in finding non-localized, intra-abdominal foreign bodies, and when the object is stuck in the omentum.



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