

Unusual Noningested Intraperitoneal Needle as a Foreign Body: Laparoscopic Removal with Two Accesses

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Clinical Image

Ingested foreign bodies are a common presentation for emergency medicine specialists, gastroenterologists, and surgeons alike. The loss of a needle in the abdomen can be a complication of laparoscopic surgery [1]. The migration of a foreign body into the abdomen after performing a puncture is unusual [2,3]. A 52-year-old man presented with two days retained broken needle in his body after puncture therapy. He was introduced to our department because the broken needle had migrated from subcutaneous to adipose tissue in abdomen. He denied any history of fevers or chills. There were no signs of acute abdomen, he presented pain in the hypogastric region. He underwent X-ray exam and CT scan of the abdomen that reported a foreign body in the lower quadrants of the abdomen (Figure 1,2 and 3).

Considering the position of the broken needle, the patient was performed by laparoscopy in general anesthesia. The operation time was about 20 min and there were only two incisions (one of 10 mm for the laparoscopic camera and one of 5 mm for insertion of grasping forceps). The trocar for laparoscopic camera was inserted first, then with Trendelenburg position and the displacement of the intestinal loops in the caudal part, the needle positioned in the Douglas's pouch was highlighted. The second 5 mm trocar was then inserted and the needle was removed with grasping forceps. The X-ray exam was performed to confirm that the broken needle was removed integrally. The patient began normal activity at 12 h after surgery and was discharged on the first day after surgery. Noningested intraperitoneal needle as a foreign body causing abdominal pain is unusual and rarely reported. Laparoscopy will be the reasonable choice for treating foreign needles in intraperitoneal cavity [4].



Figure 1: CT is effective in detecting most foreign bodies and aids in their removal by clearly locating the object of interest within the abdomen. It has a better ability to differentiate tissue densities, allowing better visualization of any inflammation, abscess and granuloma secondary to a retained foreign body. Here is an essay section.



Figure 2: Three-dimensional reconstruction for a more accurate localization of the foreign body.



Figure 3: Plain film radiography is the preferred starting imaging modality due to its ability to detect most foreign bodies quickly and economically with relatively low radiation exposure. The needle having more soft tissue density absorbs more rays and therefore appears in greater contrast with the surrounding areas. Due to the higher density, metal objects are considered radiopaque and multiple visualization, X-ray imaging is highly sensitive and specific when looking for these objects in soft tissue.

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