

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

### Surgery Quiz – Case 13

An otherwise healthy 20-year-old female patient referred to our surgical department complaining of right lower quadrant pain, anorexia and nausea. Physical examination revealed localized tenderness and involuntary guarding in the right lower quadrant. Laboratory studies revealed a significant increase in WBC count and C-reactive protein. Abdominal x-ray revealed no pathologic findings (fig. 1). An abdominal ultrasound performed which revealed a dilated appendix with a thickened wall, periappendiceal fluid collection and normal ovaries and uterus. Open appendicectomy for acute suppurative appendicitis was performed. Postoperative course was uneventful and patient discharged home on postoperative day 2. The patient re-attended the emergency department owing to a dull, steady lower abdominal pain started on postoperative day 7. An abdominal x-ray performed which revealed a V-shaped, thin, radiopaque object in the minor pelvis (fig. 2). Computed tomography (CT) of the abdomen confirmed the presence of a 20x5 mm V-shaped

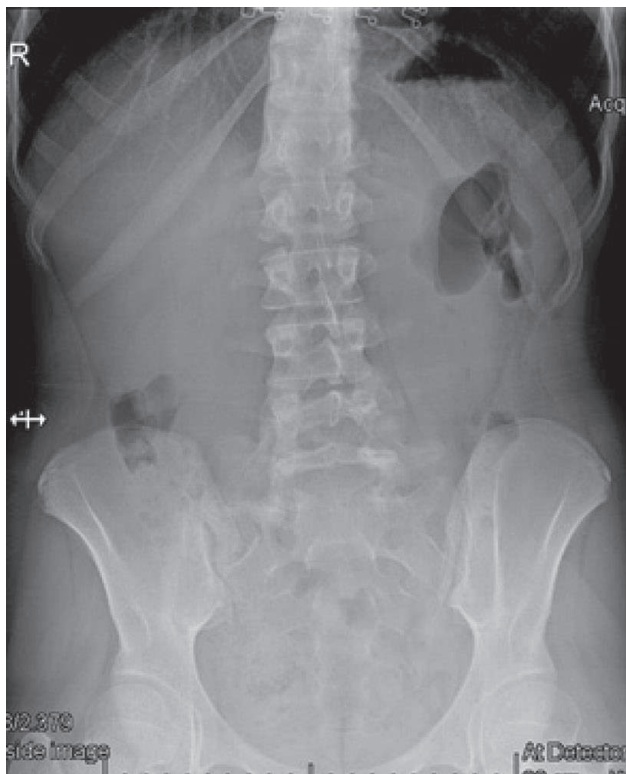


Figure 1. Preoperative normal abdominal x-ray.

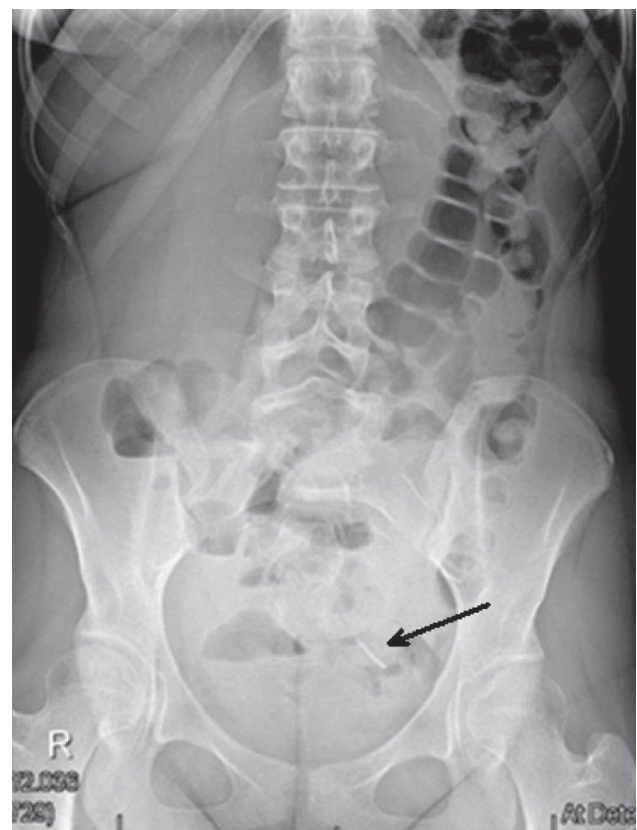


Figure 2. Postoperative abdominal x-ray revealed a V-shaped radiopaque object in the minor pelvis.

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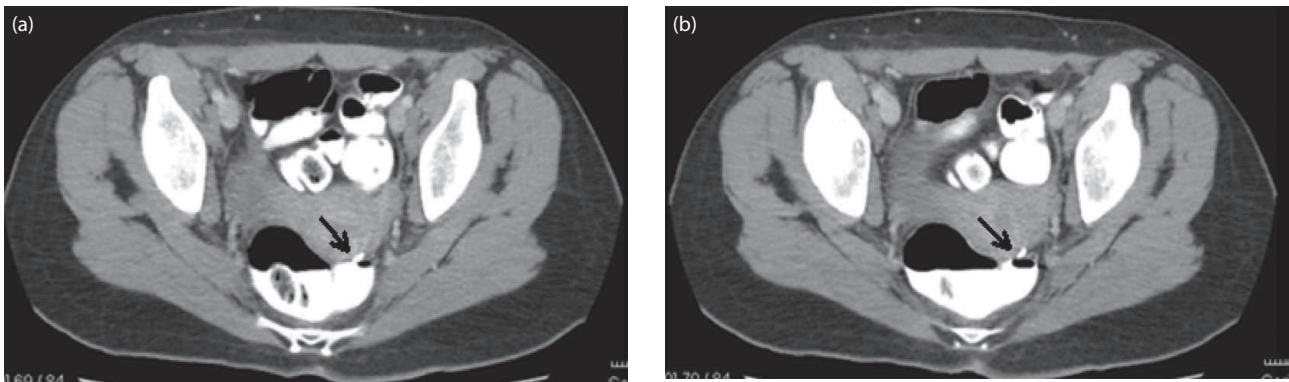
object in the posterior pouch of Douglas in close proximity to the anterior rectal wall with attenuation similar to that of the oral iodinated contrast media (fig. 3a, b). The foreign body removed laparoscopically (fig. 4).

What was the origin of the foreign body?

What went wrong at the initial operation?

#### Comment

*Surgical gauze sponges contain a radiopaque band allowing*



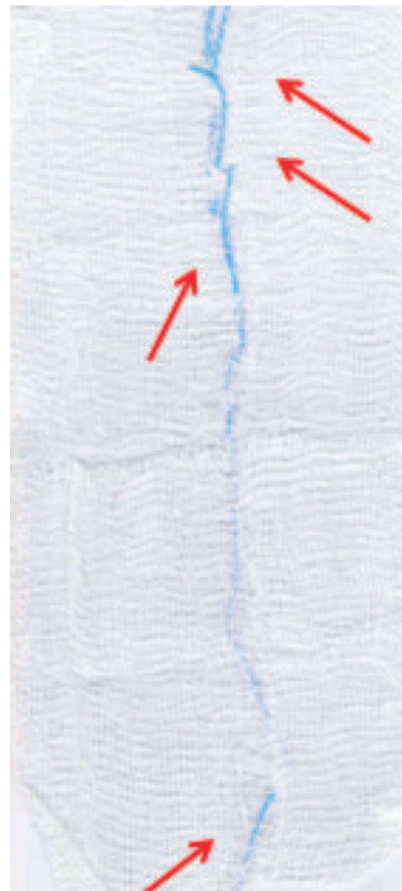
**Figure 3 a, b.** Computed tomography (CT) of the abdomen revealed a 20×5 mm object in the posterior pouch of Douglas in close proximity to the anterior rectal wall with attenuation similar to that of the oral iodinated contrast media.

*x-ray detection. This flexible band is usually made of polyester highly loaded with barium sulfate. The radiopaque band is implanted within the gauze as an uninterrupted whole. In the present case, the pelvic foreign object represented a piece of radiopaque band from a surgical gauze used to wipe off the pouch of Douglas. Occasionally we noticed that the radiopaque band was implanted in pieces within the surgical gauze sponges (fig. 5). When these fragments*

*accidentally detached from the gauze, they took a hook-shaped form and could be easily adhered to a body surface (fig. 6). This scenario was exactly happened in the present case; a fragment of the radiopaque band was detached from the gauze and adhered to the anterior wall of the rectum. Although the polyester band is totally inactive, a dilemma arose whether it should be removed. Taking into consideration the patient's family concerns, laparoscopic removal of*



**Figure 4.** The foreign body after laparoscopic removal.



**Figure 5.** Surgical gauze with the radiopaque band implanted in pieces.



**Figure 6.** Hook-shaped configuration of the band after detachment from the gauze.

*the foreign object was performed. Conclusively, economic crisis in Greece has led to a decline in the quality of surgical products used in daily medical practice. Clinicians should be aware and avoid analogous complications due to material failure.*

## References

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