

Case	(196) Intra-peritoneal iatrogenic bladder rupture: an unusual case.
Authors	
Centre	

CASE PRESENTATION

A 55-year-old female was admitted to the hospital for scheduled bilateral adnexectomy by laparoscopy due to an ovarian cyst with an intermediate likelihood of malignancy. She had a medical history of hysterectomy for fibroids at the age of 36. Less than 24 hours after surgery she presented inability to urinate and abdominal discomfort at deep palpation.

After bladder catheterization, hematuric urine was obtained. CT was requested to rule out postsurgical complication. Portal-phase abdominal CT was performed. We found low density free fluid into the right paracolic gutter, surrounding the bowel loops and in the pelvis.

Consequently, we suspected a bladder rupture and we made an excretory-phase that showed a continuity solution in the wall of the bladder dome and contrast leak into the peritoneum.

DISCUSSION

Diagnosis: intra-peritoneal iatrogenic bladder rupture. Gynecologic surgery has a considerable percentage of iatrogenic urological lesions. It should be noted that urinary tract injuries are more frequent than bladder injuries (0.3%-0.8% vs. 0.05%-0.66%, respectively). Bladder ruptures may be classified as traumatic or spontaneous.

The traumatic ones are the most frequent and these include iatrogenic. Furthermore, they can be divided in extra-peritoneal (80-90 %), intraperitoneal (10-20%) or combined. This last classification is important because it implies a change in the treatment: extra-peritoneal ruptures are treated conservatively whereas the intra-peritoneal ones require surgical intervention. Intraperitoneal bladder ruptures usually occur in the dome, which is the part of the bladder that is covered by peritoneum.

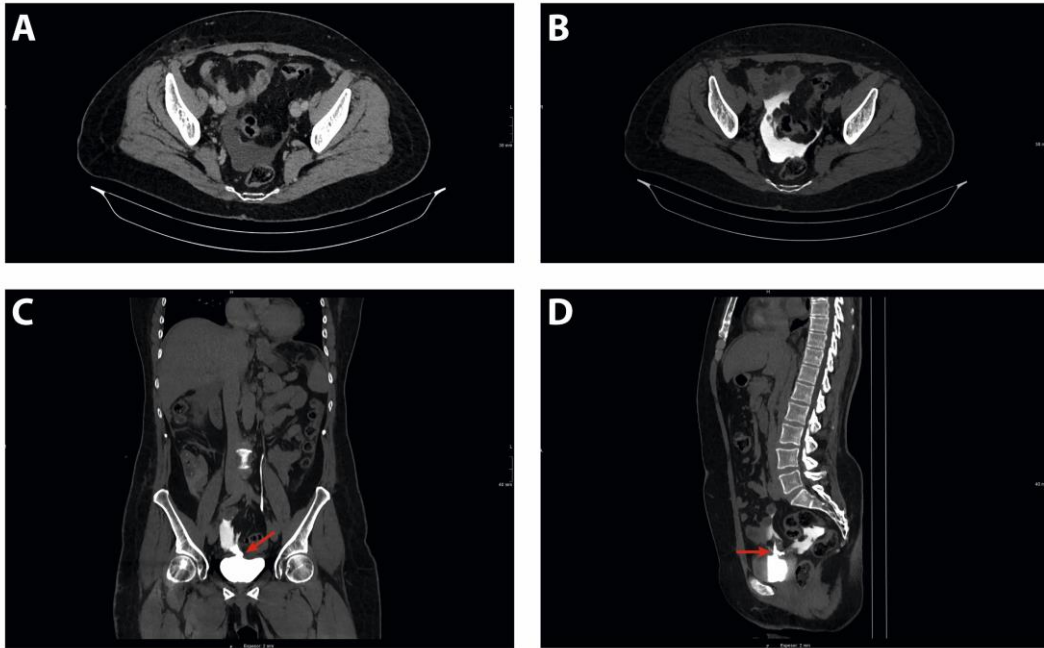
This results in a communication between the bladder and the peritoneum that manifests as some intraperitoneal free fluid. After performing CT in excretory-phase or CT cystography, the extravasated contrast solution often presents itself less concentrated in comparison to contrast solution in the bladder.

This is due to its dilution in a large space such as the peritoneum.

CONCLUSION

We should suspect a bladder rupture when a patient with a history of recent gynecologic surgery presents abdominal pain and hematuria.

However, we must bear in mind that in many occasions the clinical findings can be nonspecific and the diagnosis should be radiological (CT).



A: Portal - phase abdominal CT. Low density free fluid in the pelvis.
B: Excretory - phase abdominal CT. Contrast leak into the peritoneum.
C-D: Excretory - phase abdominal CT; coronal MIP 2mm (C) and sagittal MIP 2mm (D). Contrast leak from the bladder dome.

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