Case	(667) Intraperitoneal vesical rupture ... the power of iatrogenia
Authors	J.m. Sánchez Bermejo, J. Jover Sánchez.
Centre	Hospital Universitario Severo Ochoa.

CASE PRESENTATION

A 62-year-old man, with a personal history of bladder cancer and recurrent renal colic, went to the emergency department with hypogastric pain and bladder globe, also presenting blumberg, tachycardia and elevated achute phase reactants. Pain persists despite bladder catheter placement.

Pelvic CT without IVC (intravenous contrast) and after administration of contrast through bladder catheter is performed, visualizing a distended bladder with blood content in its interior.

At the bladder dome, extravasation of the contrast is observed, which extends through the right prevesical space and into the intraperitoneal space. A small amount of free liquid is also visualized in the right parietocolic gutter.

The patient was prepared to enter the operating room. In a TAC of control of his bladder cancer performed two months before, it was observed in the left lateral wall of the bladder a calcium density image and it was recommended to perform a cystoscopy to rule out the existence of tumor remnant.

DISCUSSION

Bladder ruptures can vary from mild to severe, with urgent surgical management being necessary in severe cases.

The main causes of these ruptures are obstructive (tumor, lithiasic ...), abdominal trauma, open or closed (especially traffic accidents), as well as iatrogenic causes, as is our case, being a rare cause of rupture. Bladder ruptures are classified according to whether they are extraperitoneal or intraperitoneal.

Extraperitoneal ruptures are more frequent in adults due to direct laceration of the bladder by bone fragments secondary to pelvic fractures, while intraperitoneal ones are more frequent in children and are usually caused by direct trauma to the distended bladder affecting the bladder dome (in our case it was due to the performance of cytoscopy). In this last case we observe contrast material between bowel loops and paracolic gutters.

As a last differential data, in extraperitoneal ruptures the treatment is conservative while in intraperitoneal ones the treatment is surgical. In both cases the realization of urotac constitutes the gold standard.

CONCLUSION

Intraperitoneal bladder rupture in adults is a rare entity but it must always be taken into account after performing a cystoscopy, especially in a patient presenting suggestive symptoms.

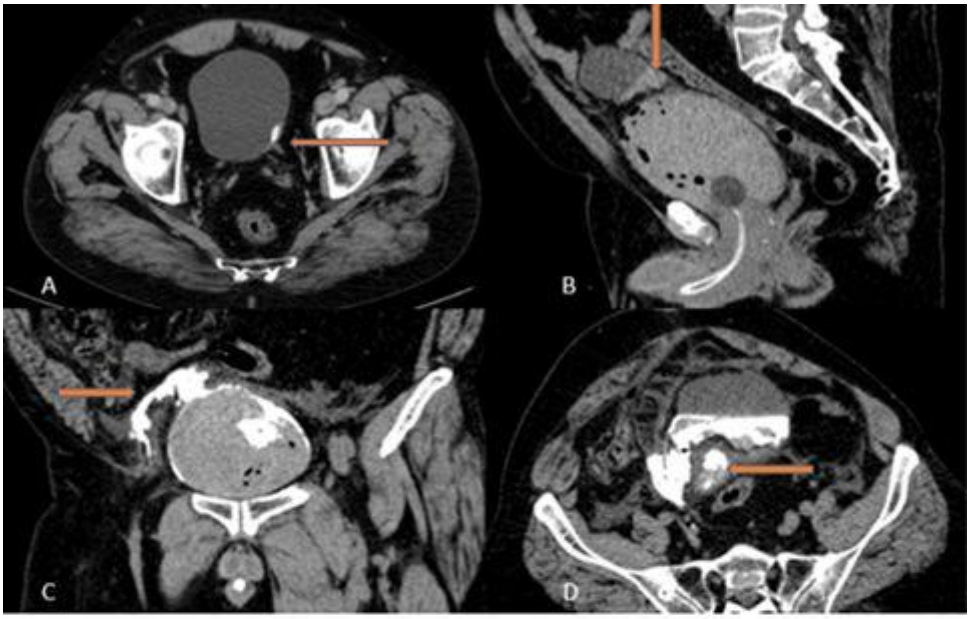

FIGURE A: Abdominal-pelvic CT with portal IVC, axial section. TAC of control of patient's vegiga cancer. In the left lateral wall of the vegiga, an image of calcium density adjacent to the ureteral meatus is visualized. Although it could be related to lithiasis, it seems to be associated with soft tissue injury (cystoscopy is recommended). FIGURE B: Pelvic CT without IVC, sagittal section. Distended bladder with content of high attenuation in its interior, in relation to blood content. An extravesical leak of this content is observed. FIGURE C and D: Pelvic CT without IVC and after the administration of contrast through bladder catheter, coronal and axial sections. At the bladder dome, extravasation of the contrast is observed, which extends through the right prevesical space and into the intraperitoneal space. Contrast slightly displaces bowel loops.

BIBLIOGRAPHY

- Ramchandani P., & Buckler PM. Imaging of genitourinary trauma. AJR Am J Roentgenol. 2009;192(6):1514-23.

- Vaccaro J. P., & Brody J. M. CT cystography in the evaluation of major bladder trauma. Radiographics. 2000; 20(5): 1373-1381.