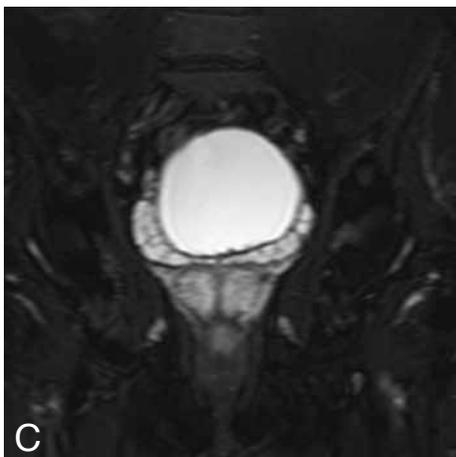
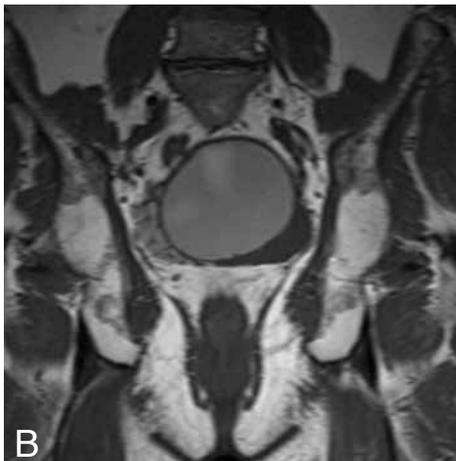


IMAGES IN CLINICAL RADIOLOGY



The giant seminal vesicle cyst: magnetic resonance imaging findings

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A 73-year-old man suffering from supra-pubic pain, dysuria and urinary retention for 3 months was slightly hypertensive, normoglycaemic, with normal renal biochemical parameters. In digital rectal examination prostate was slightly enlarged, but a cystic mass was palpable arising from the upper boarder of the prostate. He was examined by pelvic magnetic resonance imaging (MRI) with a preliminary diagnosis of pelvic mass or abscess. MRI examination revealed a homogeneous, well demarcated giant cystic mass (arrows) 12 x 8 x 6 cm in size at the posterior of the urinary bladder and superior of the prostate and seminal vesicles (A). The cyst was displacing the rectum, prostate and the urinary bladder. The cystic mass content was slightly hyperintense on T1-weighted images (C) and significantly hyperintense on T2-weighted images when compared to muscle tissue (B). The cyst was associated with seminal vesicles and MR signal features of the cyst content were similar with right seminal vesicle (C). The left seminal vesicle content was hypointense on T1- and hyperintense on T2-weighted images (Fig. B, C).

As the patient was not suitable for surgery because of advanced age and poor general condition, diagnostic and therapeutic percutaneous cyst aspiration was performed. While the bladder was completely empty, an 18-gauge needle was passed percutaneously into the cyst, and viscous brown liquid was aspirated (C). The aspirated material was examined histopathologically and the diagnosis of the seminal vesicle cyst was confirmed by the presence of degenerating spermatids.

Comment

The seminal vesicle cyst is one of the rarely encountered urological problems, but by ultimate imaging techniques, such as multi detector computed tomography and MRI, the diagnosis of the seminal vesicle cysts has become more frequent. Seminal vesicle cyst may be associated with ipsilateral renal agenesis. Although, the seminal vesicle cysts smaller than 5 cm in diameter are usually asymptomatic, those larger than 12 cm which are also named as giant seminal vesicle cysts, are frequently associated with bladder or colon obstruction.

The clinical presentation may be either dysuria or actual (or simulated) infection of the epididymis, prostate, or the cyst itself. In most of the cases, partial or complete obstruction of the ejaculatory duct leading to retention of seminal fluid containing spermatozoa is present. Seminal vesicle cysts should be differentiated from other deep pelvic cysts arising from the genital tract, hydronephrotic pelvic kidneys, abscesses, and benign or malignant tumors of bladder, rectum, sacrum, and lymph nodes by imaging modalities such as urethrography, ultrasonography, computed tomography, and MRI.

Complications such as spontaneous rupture of the cyst into the rectum or infection leading to seminal vesicle abscess can be seen. The severity of symptoms which is usually correlated with size of the cyst determines the choice of treatment. Cyst aspiration, transurethral deroofting of the cyst, laparoscopic excision of the cyst are some of the recommended choices but most of the cases with large cysts have been treated by open excision.

In diagnosis, revealing of its internal structure, demonstration of its association with the seminal vesicle, revealing the relationship with adjacent structures such as the rectum, urinary bladder and prostate, determination of the treatment method, and post-treatment follow-up of the seminal vesicle cyst, MRI is a definitive imaging method.

Reference

1. Pal D.K., Bag A.K., Sarkar S.: Giant seminal vesicle cyst with ipsilateral hypoplastic kidney: Report of a case with review of literature. *Indian J Urol*, 2006, 22: 64-65.

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