ABCÈS DE LA VÉSICULE SÉMINALE : Une nouvelle observation.

Mohamed Slim Selmi, Hassen Hentati, Hakim Fayala, Mohamed Riadh Ben Slama, Mohamed Chebil.

Department of Urology, Charles Nicolle Hospital, Tunis, Tunisia

M.Slim Selmi, H.Hentati, H.Fayala, M.Riadh Ben Slama, M. Chebil.

ABCÈS DE LA VÉSICULE SÉMINALE : UNE NOUVELLE OBSERVATION.

LA TUNISIE MEDICALE - 2009 ; Vol 87 (n°09) : 630 - 632

M.Slim Selmi, H.Hentati, H.Fayala, M.Riadh Ben Slama, M. Chebil.

SEMINAL VESICLE ABSCESS: REPORT OF A NEW CASE.

LA TUNISIE MEDICALE - 2009 ; Vol 87 (n°09) : 630 - 632

RÉSUMÉ

Introduction : L'abcès de la vésicule séminale est une pathologie rare, dont le diagnostic est habituellement fait par l'échographie endorectale et le scanner.

Observation : Les auteurs rapportent un cas d'abcès de la vésicule séminale droite chez un sujet diabétique de 60 ans, dont l'évolution a été favorable après drainage percutané transvésical. Le scanner a permis de porter le diagnostic et de guider le drainage.

Conclusion : L'abcès de le vésicule séminale est une pathologie rare dont les signes révélateurs ne sont pas spécifiques. Le drainage percutané transvésical peut être proposé avec succès.

MOTS-CLÉS

Abcès, tomodensitométrie, drainage, vésicule séminale, échographie.

SUMMARY

Introduction : Seminal vesicle abscess (SVA) is a rare pathologic entity, usually diagnosed by transrectal ultrasonography and computerized tomography scan.

Case report : We report the successful management of a seminal vesicle abscess with percutaneous transvesical drainage in a 60-year old diabetic patient. Computed tomography scan has been used for the diagnosis and the guidance of the percutaneous drainage.

Conclusion : Seminal vesicle abscess is a very rare pathology with no specific symptoms. Transvesical drainage can be proposed successfully.

KEY-WORDS

Abscess, computed tomography, drainage, seminal vesicle, ultrasonography.

Seminal vesicle abscess (SVA) is a very rare pathologic entity [1-4].
Because of its non specific clinical symptoms, the diagnosis of a seminal vesicle abscess may be extremely difficult, and several imaging modalities, including transrectal ultrasonography (TRUS), Computed tomography (CT) scan and MRI may be necessary [1-3, 5, 6].

CASE REPORT

A 60-year-old diabetic man presenting intensive perineal pain associated to irritative voiding symptoms and painful defecation was treated with oral ofloxacin for presumed urinary tract infection. Two weeks after, the symptoms increased, associated to fever of 39.1°C. Digital rectal examination showed an enlarged tender non fluctuant prostate and a right supra prostatic painful mass. Laboratory studies revealed a white cell blood count of 16,000 /mm?. Urinalysis demonstrated pyuria and urine culture grew staphylococcus aureus.
The patient was started on intravenous antibiotics (ofloxacin and gentamicin). CT scan revealed a 5-cm abscess in the right seminal vesicle and a normal left seminal vesicle (Figure 1a). A percutaneous transvesical aspiration and drainage was performed under CT guidance (Figure 1b). Thirty millilitres of purulent material were drained. Microscopic examination revealed abundant polymorphonuclear cells and culture yielded staphylococcus aureus. The 7F catheter was left in place and continued to drain for 2 days, associated to a bladder drainage by a supra pubic tube.
The patient was maintained on intravenous antibiotics. Gentamicin was stopped after 5 days and intravenous ofloxacin was continued for one week, followed by oral route for three weeks.
A follow-up CT scan 2 weeks after drainage showed the resolution of the seminal vesicle abscess (Figure 2). The patient has continued to do well without signs of recurrent infection or urinary fistula for 6 months.

DISCUSSION

Seminal vesicle abscess is a rare urologic entity [1-4]. The first case of SVA was reported in 1978[7]. Since that time, less than 30 isolated cases were reported in the literature and only one series of six cases was reported by Saglam [4] in 2004.
The etiology of SVA is unclear; many predisposing factors were reported, including diabetes mellitus [2, 5, 6, 8, 9], HIV positive status [10], recurrent urinary tract infection [6, 7, 11], indwelling Foley catheter [3, 4], and urological instrumentation [3, 4]. Anatomical anomalies such as seminal vesicle cysts, renal agenesis and ureteral ectopia can be associated [3]. Two cases of SVA developed following vasectomy were reported by Zagoria [11] and King [12].
The anatomical position of the seminal vesicles neighboring to the prostate, bladder base, ureters, rectum and peritoneum accounts for the wide variety of presenting symptoms seen with this condition [2-4].

Figure 1: a. CT scan showing right seminal vesicle abscess upon admission (arrowhead). **b:** Percutaneous transvesical catheter draining the abscess (arrow).

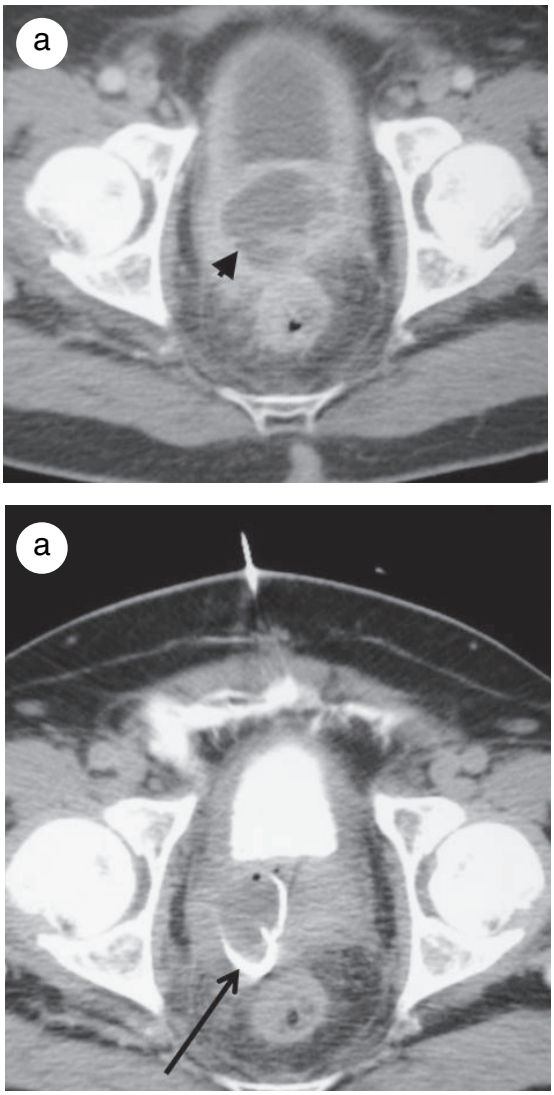
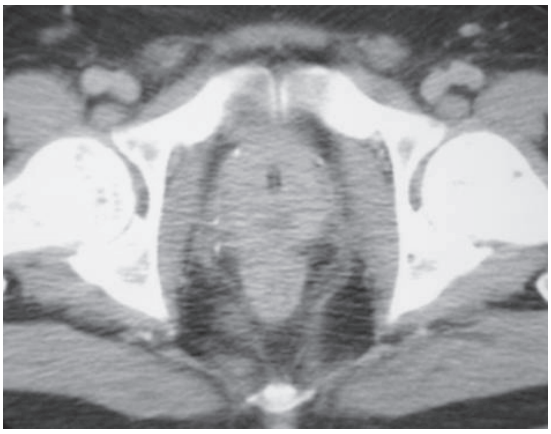


Figure 2: CT scan performed 2 weeks after drainage. Note the resolution of the abscess.



The symptoms of SVA can be fever, dysuria, irritative urinary symptoms, hematuria, urinary retention, hemospermia, rectal discomfort, perineal or inguinal pain [2-4]. Our patient complained of irritative voiding symptoms and painful defecation.

The rectal examination can show a supra prostatic mass. Ipsilateral spermatic cord induration and perineal tenderness on examination can also be found [3, 6].

The diagnosis of SVA may be difficult and several diagnostic modalities including TRUS, CT and MRI may be necessary [2-4, 6].

CT scan has been the most common diagnostic imaging procedure utilized [2, 9, 11-14]. CT characteristics of SVA have been described as unilateral or bilateral seminal vesicle enlargement, low density areas within the seminal vesicle, inflammatory changes in the surrounding fat and focal or diffuse thickening of the bladder wall [2].

Lee [15] was the first to report the role of TRUS in the diagnosis of SVA. Many authors [1, 4, 5, 15] agree that TRUS is probably superior to CT scan and MRI in localizing a SVA. The advantages of TRUS over CT and MRI in the diagnosis of SVA are the real time image that can show the extent of the abscess cavity, the image capability into the longitudinal and axial planes, and the ability to perform an ultrasound guided puncture of the lesion for diagnostic and therapeutic purpose [4].

A SVA can be verified by MRI [1]. Due to their fluid richness, the seminal vesicles are hypointense on T1-weighted and hyperintense on T2-weighted images. Inflammatory changes of the seminal vesicles include enlargement and alteration of signal intensity. On T1-weighted images, the inflamed seminal vesicle shows a decreased signal intensity as compared to normal, whereas on T2-weighted images, the signal intensity increases significantly and it is distinctly higher than fat [1].

Intravenous antibiotic therapy is the first line of therapy in a patient with SVA. SVA can be managed conservatively with antibiotics alone [9, 14]. If the patient is not responding clinically to intravenous antibiotics, early drainage of the abscess percutaneously, transurethtrally, or via an open surgical approach is indicated [6].

Transvesical (like our patient) or transpubic percutaneous drainage is attractive because it can usually be accomplished under local anesthesia [6].

Transrectal ultrasound guided transperineal or transrectal puncture and aspiration can be performed successfully, rapidly and without complications, however, sometimes the purulent aspirate can be too viscous to be drained adequately via these techniques [3, 15].

Other authors [3, 6] propose a transurethral drainage. Frey [6] proposed the injection of methylene blue dye via vasotomies to facilitate the identification of the abscess cavities and guide the depth of transurethral drainage.

Major surgical intervention, such as transvesical, retrovesical or perineal surgery has significant associated morbidity [3].

CONCLUSION

SVA is a very rare pathology with no specific symptoms. TURS and CT scan are the imaging modalities of choice for diagnosis and during drainage of SVA.

Many mini invasive drainage modalities can be proposed successfully. Transvesical modality can do well.

REFERENCES

1. Doringer E, Chandra I, Sarica K, et al: MRI of bilateral seminal vesicle abscesses. Eur J Radiol 1991 ; 12 :60-2,.
2. Pandey P, Peters J, Shingleton WB: Seminal vesicle abscess: a case report and review of literature. Scand J Urol Nephrol. 1995 ; 29:521-4.
3. Fox CW, Vaccaro JA, Kiesling VJ, Belville WD: Seminal vesicle abscess: the use of computerized coaxial tomography for diagnosis and therapy. J Urol 1998; 139:384-5.
4. Sa€lam M, U€urel S, Kilciler M, et al: Transrectal ultrasound-guided transperineal and transrectal management of seminal vesicle abscesses. Eur J Radiol 2004 ; 52:329-334.
5. Kore RN, McLoughlin J, Kabala J, et al: Seminal vesicle abscess. Br J Urol1994 ; 73:331-2.
6. Frye K, Loughlin K: Successful transurethral drainage of bilateral seminal vesicle abscesses. J Urol 1988 ; 139:1323-4.
7. Rajfer J, Eggleston JC, Sanders RC, et al; Fever and prostatic mass in a young man. J Urol 1978; 119:555–8.
8. Chandra I, Doringer E, Sarica K, et al; Bilateral seminal vesicle abscesses. Eur Urol 1991 ;20:164-61.
9. Kang YS, Fishman EK, Kuhlman JE, et al: Seminal vesicle abscesses : spectrum of computed tomographic findings. Urol Radiol 1989; 11:182-5.
10. Jensen KH, Lundvall L: Peritonitis caused by abscess in the seminal vesicle. Case report. Acta Chir Scand 1988 ; 154:245.
11. Zagoria RJ, Papanicolaou N, Pfister RC, et al: Seminal vesicle abscess after vasectomy: evaluation by transrectal sonography and CT. AJR 1987 ;149: 137-8.
12. King BF, Hattery RR, Lieber MM, et al: Seminal vesicle imaging. RadioGraphics 1989 ; 9: 653-676.
13. Gutiérrez R, Carrere W, Llopis J, et al: Seminal vesicle abscess: two case reports and a review of the literature. Urol Int 1994 ; 52:45-7.
14. Kennelly MJ, Oesterling JE : Conservative management of a seminal vesicle abscess. J Urol 1989; 141:1432-3.
15. Lee SB, Lee F, Solomon MH, et al: Seminal vesicle abscess: diagnosis by transrectal ultrasound. J Clin Ultrasound 1986 ; 14:546-9.