

中文題目：長期留置尿管的少見併發症：儲精囊膿瘍

英文題目：A rare long-term indwelling urinary catheters related complication: seminal vesicle abscess

作者：洪維澤¹、陳甫綸^{1,2,3}

服務單位：¹臺北醫學大學·市立萬芳醫院-內科部-感染科，²臺北醫學大學·市立萬芳醫院-感染管制室，³臺北醫學大學-醫學院-醫學系-內科學科

Abstract:

A 68-year-old male presented to the emergency department with fever, shortness of breath and darken, turbid urine. He was admitted to intensive care units with diagnosed hyperosmolar hyperglycemic state and sepsis secondary to recurrent urinary tract infection. For occult infection source, suspected anatomical abnormalities, and a history of long-term indwelling urinary catheter with recent episodes of urinary tract infection, the patient received a computed tomography (CT) scan and it revealed a seminal vesicle abscess, without evidence of prostate involvement. There was no rectovesical fistula formation. After tight blood sugar control and effective intra-venous antibiotics treatment, the patient recovered well and had no recurrence urinary tract infection.

Introduction:

Seminal vesicle abscess is a rarely encountered pathology. It mainly occurs in subjects with predisposing factors include urinary tract infection, diabetes, indwelling catheters, urological instrumentation/surgery, intraabdominal carcinomatosis and anatomical abnormalities(1-3). It may be associated with other urogenital infections. It is usually diagnosed with computed tomography scan and transrectal ultrasonography(4). The associated symptoms can be non-specific such as dysuria, fever, perineal or abdominal pain, ejaculation of purulent material and other urogenital symptoms.

Case report:

Here we presented a case of a 68-year-old man presented to the emergency department with fever, shortness of breath and darken, turbid appearance of urine. He had a medical history including type 2 diabetes mellitus, and old bilateral subdural hematoma status post ventriculo-peritoneal shunt in bed-ridden status. He had long-term indwelling urinary catheter for three months. Hematological indices demonstrated leukocytosis with neutrophil predominance and increased C-reactive protein level, as well as hyperosmolar hyperglycemia status without diabetes ketone acidosis. He received broad-spectrum antibiotics empirically due to recurrent urinary tract infection, suspected health-care associated pathogens with drug resistance. However, turbid urine off and on, mixed dark-brown color materials. For occult infection source, suspected anatomical abnormalities, such as rectovesical fistula formation, he received an abdomino-pelvic computed tomography scan. It revealed left seminal vesicle abscess, without evidence of prostate involvement (figure 1). Urine culture yielded extended spectrum betalactamase-producing *E. coli*. He received antibiotics treatment for three weeks. Following up transrectal ultrasonography two weeks after admission revealed a mild enlargement of seminal vesical with hetero-echogenecity (figure 2). He had no more recurrent urinary tract infection after removal of urinary catheter.

Discussion:

Seminal vesicle abscesses are a rare urological event. The precise etiology remains unclear, however, they are usually seen as part of the spectrum of either acute or chronic prostatitis. Various risk factors have been identified, including type 2 diabetes mellitus, urinary tract infection, long-term catheters, and congenital anatomical anomalies. There were some cases after vasectomy(4-5). The symptoms of seminal vesicle abscess can be non-specific including fever, chills, hematuria, dysuria, scrotal, perineal, or rectal pain, ejaculation of purulent material. *Escherichia coli* or *Staphylococcus* have been found to be the most common infectious agents. Computed tomography scan, magnetic resonance and transrectal ultrasonography are tools in the evaluation and localization of the abscess. Typical CT findings include: unilateral or bilateral seminal vesicle enlargement with a central irregular low-density zone, inflammatory changes of adjacent fat, thickening of the adjacent organs(6). Gas inside the vesicle may be seen. Conservative medical treatment with antibiotics is the first line therapy. If the patient do not respond to antibiotic therapy, drainage of the abscess is required. Multiple drainage techniques have been reported such as transperineal, transgluteal, or transrectal needle aspiration, transurethral incision, and surgical drainage via laparotomy(6).

For non-specific or masked symptoms and prolonged antibiotics therapy with adequate source control by adequate drainage would be indicated for complicated cases, such as missed diagnosis of seminal vesicle abscess, we highlight that the importance of imaging in establishing the focus of infection. Clinicians should aggressively recognize the focus of infection and avoid unnecessary long-term indwelling urinary catheters.

Reference:

1. Fox C, Vaccaro J, Kiesling V, Belville W. Seminal vesicle abscess: The use of computerized coaxial tomography for diagnosis and therapy. *J Urol*. 1998;139:384–385.
2. Zagoria R, Papanicolaou N, Pfister R, Stafford S, Young H. Seminal vesicle abscess after vasectomy: Evaluation by transrectal sonography and CT. *Am J Roent*. 1987;149:137–138.
3. Gulankiar A, Clark J, Feliz T. Prostatic abscess: an unusual presentation of metastatic prostate cancer. *Br J Urol*. 1998;82:309–310.
4. Zagoria RJ, Papanicolaou N, Pfister RC, Stafford SA, Young HH 2nd. Seminal vesicle abscess after vasectomy: Evaluation by transrectal sonography and CT. *AJR Am J Roentgenol*. 1987 Jul;149:137-8.
5. Sihra N, Aboelsoud M, Oliyide A, Counsell A, Gall Z. Seminal Vesicle Abscess—An Unusual Complication Following Vasectomy. *Urology*. 2018 Jun;116:20-22.
6. Imperatore V1, Creta M, Di Meo S, Buonopane R, Spirito L, Mirone V. Seminal vesicle abscess causing unilateral hydronephrosis: A case report. *Arch Ital Urol Androl*. 2017 Dec 31;89:321-322.

