

中文題目：泌尿道結石及感染所致腰大肌膿瘍之經典影像分享 - 一個案例報告

英文題目：Image of psoas abscess secondary to urinary tract stones and infection - A case report

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## **Introduction**

Psoas abscess (also called iliopsoas) is an accumulation of pus within the psoas muscle. It is relatively uncommon and the clinical presentation is often nonspecific. The diagnosis of psoas abscess was established through imaging. Today, we present a case of psoas abscess caused by urinary tract stones and infection. Discussion of the classic symptoms and images of kidney, ureter, and bladder (KUB) x-ray, ultrasonography and computed tomography(CT) were attached.

## **Case presentation**

A 61-year-old female without underlying systemic disease visited emergency department because of constant severe pain on the right flank for one day. The pain progressed rapidly and was so severe that the patient was not able to stand straight and limp while walking. Symptoms of right flank swelling and tenderness were also complained. The patient recalled that initially she had dysuria, low-grade fever around 37~38.5°C and constant headache for 2 weeks. During the whole course, there was no hematuria, no upper respiratory infection symptom, no nausea, no vomiting nor diarrhea presented. Physical examination showed fever up to 38.4°C and right costovertebral angle tenderness with a palpable, movable mass about 10x10cm, without skin rash or wound. Lab data showed leukocytosis with neutrophils predominant and elevated C-Reactive protein(CRP) level. Right renal stone and absence shadow of right psoas muscle were discovered in KUB x-ray(Figure 1). A heterogeneously hypoechoic collection nearby the right kidney was found in abdominal ultrasonography(Figure 2). Abdominal CT(Figure 3) revealed right renal stones with pyonephrosis and pyoureter and right psoas muscle abscess(133 mm). The patient was treated with percutaneous abscess drainage and antibiotic treatment. After 6 days of admission, the patient was discharged from our hospital successfully.

## **Discussion**

Initial symptoms of psoas abscess are typically nonspecific including fever, malaise, and vague abdominal pain. Over time, more specific symptoms may develop, such as: abdominal and flank discomfort, flexed and externally rotated hip, pain on movement of hip. The classic triad of psoas abscess including back pain, limp, and fever but fever may only be present in 30% of patients. The diagnosis is established through imaging such as magnetic resonance imaging(MRI) or CT. Ultrasound may be useful for diagnosis in some patients. Treatment for psoas abscess generally consists of antibiotic therapy and drainage of abscess. In this case, right

psoas muscle abscess (133mm) secondary to right renal stones with pyonephrosis and pyoureter was diagnosed by abdominal CT, classic symptoms and image was presented.

### Figure

Figure 1 - Plain radiograph of abdomen showed an intact left psoas muscle shadow, while the shadow of right psoas muscle was not visualized. There was a small calcification in the right kidney in favor of renal stone.



Figure 2 - Abdominal examination with a curvilinear array probe showed a heterogeneously hypoechoic collection nearby the right kidney.



Figure 3 - Abdominal CT revealed right renal stones with pyonephrosis and pyoureter and right psoas muscle abscess(133 mm).



## Reference

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