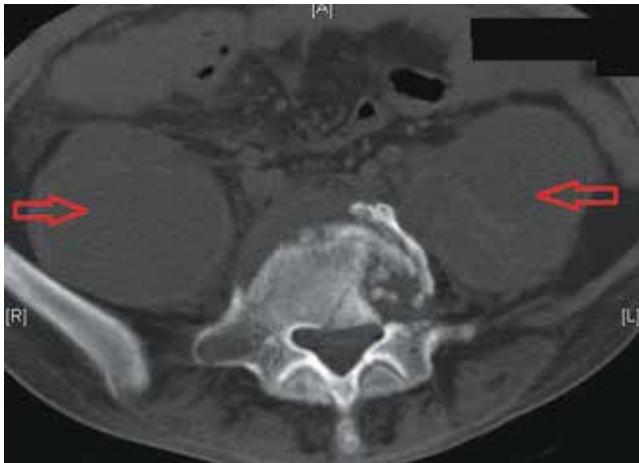


## THE CLINICAL PICTURE

**JOHN SAMUEL BANERJI, MS (GENERAL SURGERY),  
MCh (UROLOGY), DNB (UROLOGY)**

Associate Professor, Department of Urology, Christian Medical College, Vellore, India; Fellow in Urologic Oncology, Section of Urology and Renal Transplantation, Virginia Mason Medical Center, Seattle, WA

# Persistent back pain in a young woman



**FIGURE 1.** Noncontrast computed tomography shows bilateral large psoas abscesses (red arrows) and destruction of the vertebral plate.

**A** 24-YEAR-OLD WOMAN FROM northern India came to our medical center because of lower back pain for the past 2 years. The pain was initially a dull, continuous ache and did not radiate. She had no fever, night sweats, weight loss, or other constitutional symptoms.

In addition, she had seen her local practitioner 1 year earlier because of burning during urination and occasional frequency. She had been found to have an 8-mm calculus in the lower calyx of the left kidney, for which she underwent two sessions of shock-wave lithotripsy, but she did not pass any stone fragments. Because her back pain continued, she sought medical treatment at our center.

On evaluation at our facility, she was found to have paraspinal muscle spasm and scoliosis. Her gait was antalgic. Sensations were normal over both lower limbs in all dermatomes. Power was grade 5 throughout, and deep tendon reflexes were normal. The straight-leg-raising test was positive for reproducible pain in the lower back and sciatic pain radiating down the back of both legs.

doi:10.3949/ccjm.82a.14136



**FIGURE 2.** A coronal reconstructed tomographic image shows involvement of multiple vertebral bodies (red arrows), as well as an 8-mm calculus in the lower left renal calyx (yellow arrow).

Laboratory testing showed that her hemoglobin was low at 9.7 g/dL (reference range 11.5–15.5), but the rest of the complete blood cell count was within normal limits. C-reactive protein was elevated at 70.7 mg/L (reference range < 6 mg/L). An enzyme-linked immunosorbent assay was negative for human immunodeficiency virus (HIV).

Nonenhanced computed tomography of the abdomen revealed destruction of vertebral body end plates and disks from the L2 lower end plate to the L5 superior end plate. The left transverse processes of the L3, L4, and L5 vertebral bodies were also destroyed. The scan also revealed bilateral psoas abscesses larger than 10 by 10 cm (FIGURE 1), with the right side larger than the left, and confirmed a stone in the left lower renal calyx (FIGURE 2).

She underwent bilateral ultrasonographically guided drainage of the abscesses. Culture of the thick pus that was aspirated grew *Mycobacterium tuberculosis*. Tu-

berculosis therapy was started with isoniazid, rifampicin, pyrazinamide, and ethambutol. Her condition improved rapidly over the next 2 to 3 months. She completed 18 months of tuberculosis therapy.

Because her spine was stable, with no collapse of vertebrae, she did not require orthopedic intervention.

### ■ SPINAL TUBERCULOSIS

Spinal tuberculosis, or Pott disease, is still a common cause of back pain in areas where the infection is rampant, such as northern India.<sup>1</sup> *Mycobacterium* infections continue to be a problem, especially coexisting with HIV infection.<sup>2,3</sup> In fact, the World Health Organization and the United States Agency for International Development have referred to this as a twin epidemic.<sup>4</sup>

Early diagnosis and prompt treatment can prevent or minimize spinal deformity and per-

manent neurologic disability.<sup>5</sup> Rapidly progressive and significant neurologic involvement requires surgical management. On the other hand, Patil et al<sup>6</sup> reported a series of 50 cases in which early radiologic evidence of spinal cord compression from tuberculosis was managed nonoperatively.

When evaluating back pain, symptoms that should ring the alarm include weight loss, constitutional symptoms, no change in pain status after 6 weeks of treatment with a nonsteroidal anti-inflammatory drug, pain at night or at rest, and neurologic symptoms. Our patient had no relief of pain and thus sought treatment.

An important take-home message is that small, nonobstructive renal calculi almost never cause back pain, and when incidentally detected, as in this patient, should not be considered the cause of back pain. ■

### ■ REFERENCES

1. **McLain RF, Isada C.** Spinal tuberculosis deserves a place on the radar screen. *Cleve Clin J Med* 2004; 71:537–549.
2. **Vermund SH, Yamamoto N.** Co-infection with human immunodeficiency virus and tuberculosis in Asia. *Tuberculosis (Edinb)* 2007; 87(suppl 1):S18–S25.
3. **Candy S, Chang G, Andronikou S.** Acute myelopathy or cauda equina syndrome in HIV-positive adults in a tuberculosis endemic setting: MRI, clinical, and pathologic findings. *AJNR Am J Neuroradiol* 2014; 35:1634–1641.
4. **USAID.** The twin epidemics: HIV and TB co-infection. [www.usaid.gov/news-information/fact-sheets/twin-epidemics-hiv-and-tb-co-infec-tion](http://www.usaid.gov/news-information/fact-sheets/twin-epidemics-hiv-and-tb-co-infec-tion). Accessed April 30, 2015.
5. **Jain AK.** Tuberculosis of the spine: a fresh look at an old disease. *J Bone Joint Surg Br* 2010; 92:905–913.
6. **Patil SS, Mohite S, Varma R, Bhojraj SY, Nene AM.** Non-surgical management of cord compression in tuberculosis: a series of surprises. *Asian Spine J* 2014; 8:315–321.

**ADDRESS:** John Samuel Banerji, MS (General Surgery), MCh (Urology), DNB (Urology), Associate Professor, Department of Urology, Christian Medical College, Vellore, Ida Scudder Road, Tamil Nadu 632004, India; e-mail: johnsbanerji@cmcvellore.ac.in