Atypical isolated urethral tuberculosis associated with inflammatory stenosis and fistulas

Sir,

A 40-year-old patient, who was vaccinated for BCG without any history of tuberculosis and sexually transmitted infections, presented with dysuria, purulent discharge, and fistula evolving along 1 year. The patient showed nodular lesions, urethral induration on the urethral path extending laterally to the cavernous bodies with multiple fistulas, and pus excretion [Figure 1]. Thick purulent discharge was observed when the urethra was pressed.

The biological assessment revealed an inflammatory syndrome. The patient received antibiotic therapy with ciprofloxacin and had benefited from urinary drainage by suprapubic catheter. Urethrocystography revealed an extended narrowing of the whole anterior urethra associated multiple fistulas. The bladder control showed a bilateral secondary urethrography [Figure 2].

After 6 weeks of urinary drainage and antibiotic therapy, the first urethroplasty showed enlargement with clearance of narrowed urethral sinus tracts. Healing of the injury was marked by significant delay, associated with continuous fistula and purulent discharge. Tuberculosis was suspected, and Koch bacillus assessment showed a positive tuberculin while multiple biopsies confirmed urethral tuberculosis. Tuberculosis treatment was started and the evolution was marked by a localized rapid improvement. The second stage of urethroplasty was scheduled 2 months after the start of antituberculous treatment.

Isolated urethral pathway infection is essentially through spread from the neighborhood contaminated site. However, entry of the Koch bacillus in the urethra spongy body through blood is possible.[1-3] Anyway, isolated urethral form of tuberculosis, as found in this case, is rare with nonspecific clinical profile.[4,5] The urethral infection might occur in acute form of urethritis, associated with severe prostate or seminal discharge in men. It might evolve into a chronic form of urethral narrowing with sclerosis and inflammation that is often extended and associated with unusual multiple fistulas.[5]

Figure 1: Fistulated peno-scrotal orifices with pending pus

Figure 2: Anterior narrowing of the urethra toward the scrotum and perineum

The diagnosis might be suspected after initial full voiding, as in the case reported here, since fistulas are still persistent despite urinary drainage and urethra and fistula clearing. The patient's history of tuberculosis might suggest diagnosis.

In addition to retrograde and voiding urethrography that allows exploring the extent and severity of urethral lesions, it is essential to investigate the rest of the urogenital tract.

The urine culture confirms the diagnosis when it is used to isolate acid-alcohol resistant bacilli species. However, this test is rarely positive. The anatomopathology of peri-urethral scar tissue and fistula tracts is very specific to tuberculosis, since they show epithelioid granulomas with giant cell caseous necrosis.

The poly-antibiotic anti-bacillary treatment is administered for 6 months, and has to be completed 6 weeks before any surgical intervention. This allows preventing reactivation of latent forms in the scar tissue and dissemination of Koch Bacillus the healthier tissue during surgery.[5,6] The treatment has to be similar to that of nonspecific BK forms. Expended urethroplasty is preferred considering the fibrosis that is often found in urethra and putrefied urethral tissues.

Isolated urethral tuberculosis is very rare even in endemic countries. We suggest considering urethral tuberculosis before a urethral stricture in patients living in endemic areas of tuberculosis.

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