In January 2012, a previously healthy 8-year-old aboriginal boy presented to our pediatric department with a 2-week history of bilateral thigh pain after running 1000 m. The pain progressed, initially confined to his left inner proximal thighs and extended to the right thighs. The pain was dull, constant, and aggravated by activity. There was no fever, trauma, rash, or genitourinary or respiratory infections. On examination, the inner proximal thighs were tender, and the tenderness radiated into both sides of the groin and lower abdomen. He walked with an antalgic gait. The Patrick test and prone internal rotation of hip were limited by pain. The boy had marked proximal muscle weakness in both thighs, but with normal distal power, deep tendon reflexes, and sensation elsewhere. Blood tests showed a high concentration of C-reactive protein (51.4 mg/L) and his leukocyte count was 13.7 \times 10^9/L. Serum creatinine kinase was within normal limits. Pelvic radiography was unremarkable. Two days later he had a spiking fever (38.6°C) and leukocytosis remained, with an elevated erythrocyte sedimentation rate (104 mm/h). Repeat examination showed local tenderness over the suprapubic area. Urgent magnetic resonance imaging of the pelvis revealed fluid collection within the symphysis pubis, and subcondral cortical destruction of pubic bones, and edema of adjacent muscle and soft tissue (Fig. 1). Blood cultures were negative. The clinical symptoms and signs together with the radiological findings were compatible with a diagnosis of septic arthritis of the pubic symphysis. He received intravenous oxacillin and oral rifampicin initially. Rifampin was discontinued 10 days later due to elevated liver function profiles. Oxacillin was switched to dicloxacillin when he was discharged. In total, he received 39 days treatment with antibiotics until the erythrocyte sedimentation rate returned to normal, and he was free from symptoms.

In children, limping can be caused by a wide variety of conditions. Septic arthritis of the pubic symphysis is a rare cause. To our knowledge the case is the first reported case in Taiwan. It may result in morbidity such as retropubic abscesses or mortality. However it is difficult to diagnose early due to low clinical suspicion. In the case, he had the principal features of the disease involving multiple points including characteristic groin and thigh pain, gait disturbance, and pain with hip motion. Ross and Hu reported 74% of patients were febrile at presentation. MRI is the gold standard for diagnosis.
standard imaging tool for diagnosis. These injuries are more prevalent in persons who experienced female incontinence surgery, sports with adductor strain, pelvic malignancy, and intravenous drug use. The causative organisms depend on risk factors; Staphylococcus aureus infection occurs mostly in athletes, Pseudomonas aeruginosa in intravenous drug users, polymicrobial infection in persons with pelvic malignancies. Prompt treatments with empirical antibiotics, and removal of any purulent material while advanced lesion, are the mainstay of treatment for septic arthritis of the pubic symphysis. The choice of antibiotics is based on the likelihood of the organism involved and modified by the result of culture. There is little evidence for the optimum duration of therapy, but specialists suggested antibiotic course of at least 4 to 6 weeks is necessary.

References


Figure 1 Pelvic magnetic resonance imaging showed joint effusion of symphysis pubis with subcondral cortical destruction and bone marrow edema (black arrow). It was more severe on the left side. Muscle edema and fluid accumulation were found at bilateral proximal thighs (white arrows). The condition was more obvious at the right adductor longus, left adductor brevis and obturator externus.