

Images in clinical medicine



A rare case of post tuberculosis sequelae of left knee with triple deformity

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A rare case of post tuberculosis sequelae of left knee with triple deformity

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Image in medicine

Triple knee deformity is one of the rare sequelae following tuberculosis infection. It includes flexion of the knee, posterolateral subluxation of tibia and external rotation of tibia over femoral condyles presenting in coalition and leading to debilitating deformity. Currently, various modalities of operative intervention are mentioned in the literature consisting of Ilizarov ring fixator or limb reconstruction system application (pediatric age group), total knee arthroplasty, arthrodesis coupled with synovectomy. Eleven years old male presented to orthopedics outpatient department with pain, swelling and loss of movement of left knee for two years. Swelling was insidious in onset and gradually progressed over the duration of two

years, leading to deformity which has aggravated so much so that the patient is unable to do any movements of the left knee joint. The patient was on an anti-tubercular regime for 6 months due to which swelling subsided minimally, but the deformity persisted even after sustained traction. On local examination, the knee was fixed in flexion in 100 degrees. Hamstring contracture was seen in posterior aspect with severe wasting of hamstring

and quadriceps muscle. Patient was managed with Ilizarov fixator application. Two straight wires were passed ten cm distal to the first ring and attached to the ring. Two straight wires were passed to the distal femur, proximal to the second ring, and attached to the ring. Currently, the patient is being managed with periodic distraction of Ilizarov ring about 0.25 mm per day.



Figure 1: shows management of triple knee deformity with hinge Ilizarov ring fixator application: (A) deformity of left knee fixed in 100 degrees flexions; (B) X-ray of left knee shows juxta-articular osteopenia and posterior subluxation of tibia with bony erosions leading to narrowing of the joint space; (C) hinge illizarov ring fixator application for gradual correction of deformity; (D) X-ray of left knee shows fixation with Ilizarov rings (two proximal and two distal rings)