

Management Of Sequelae Of Osteo-Articular Infection In Children

Dr Ashok Johari

Director, ENABLE International Centre for Paediatric Musculoskeletal Care, Mumbai, India.

The epidemiology and diagnosis of osteoarticular infections (OAI) have changed considerably in recent years. Although the clinical course of OAI is mostly benign, with shorter antibiotic regimens and simplified treatments, serious functional impairments and life-threatening complications can occur, especially in case of delayed diagnosis or inadequate/delayed management. Newborns and patients with sickle cell disease have greater risk of developing osteoarticular infection sequelae, which need to be detected and managed early. The main sequelae of osteoarticular infections are angular deformities in the coronal plane, due to partial growth arrest, limb length discrepancy, stiffness, pathological fractures, osteonecrosis and joint subluxation or dislocation. The management of sequelae depends upon patients age, extent of deformity or complication and immune status of patient. The procedures to consider are reduction of any subluxation or dislocation, debridement and saucerization, release of contractures, joint reconstruction in skeletally immature children, arthrodiastasis, arthrodesis and arthroplasty at the end of growth. Angular deformities in coronal plane are managed by hemiepiphysiodesis, limb length discrepancy can be managed by contralateral growth modulation or ipsilateral limb lengthening. Early diagnosis and effective management of osteoarticular infection is warranted to prevent the serious sequelae leading to disability and decreased quality of life. The management of sequelae depends on multiple variables and is usually decided on case to case basis.

This lecture illustrates the principles of management of sequelae of osteoarticular infections in children.