Tuberculosis of the spine in children: Does Drug Resistance Affect outcomes?

Ghanshyam Kakadiya
Topiwala National Medical College & Nair Hospital, India

Abstract

Introduction: Incidence of multidrug resistant (MDR) tuberculosis (TB) is increasing. Treatment protocols need to be modified accordingly. We evaluated outcomes in 148 children treated for spinal TB with a minimum follow up of 12 months.

Materials & Methods: We retrospectively reviewed 148 children (76 males and 72 females) treated between June 2016 and one 2018. 60 were treated conservatively. 88 required surgery. Patients managed conservatively underwent CT guided biopsy of the lesion: samples were obtained during surgery in the rest. Mycobacteria Growth Indicator Tube (MGIT) and Genexpert tests were done in all the cases. Anti-tubercular regimen (ATT) was modified as per the sensitivity. Outcomes in the form of response and duration of therapy, and complications like secondary infection, wound issues, and implant failure were noted.

Results: Four patient (6%) in the conservatively managed group and 40 (45%) in the operative group required second line ATT. Mean duration of AKT was 12.6 months (range 12-14 months) in the conservatively managed group. In the operative group, duration of AKT averaged 13.9 months in those on first line ATT and 15.9 months in those requiring second line regimen. None of the conservatively managed patients, nor any of the operated patients on first line ATT had any significant complication. 16 (18%) of the operatively managed patients had complications in the form of secondary infection with discharging sinus requiring implant removal in four, implant failure requiring revision of implants in 8 (with four having neurological deterioration), and four requiring revision of implants as well as management of wound dehiscence. 16 of the 40 operated patients (40%) who were on second line ATT had complications.

Biography

Ghanshyam Kakadiya is practising at Topiwala National Medical College & Nair Hospital. His research interest include Spine and spinal disorders.

Publications

A comparative study of the management of pediatric femoral shaft fractures treated conservatively with traction or spica

Hyperglycemia and its influence on development of lumbar degenerative disc disease

Clinical, Radiological and Functional Results of Transforaminal Lumbar Interbody Fusion in Degenerative Spondylolisthesis

Osteoporotic burst fracture-clinical, radiological and functional outcome of three-column reconstruction using single posterior approach

Postoperative radiological evaluation of anterior cruciate ligament reconstruction and its complications