Tubercular infection of the cervical spine is more likely to cause deformity, neurological deficit, and growth alteration in children than in adults, owing to a lack of restraint, greater mobility, and cartilaginous open physeal plates at both ends of the vertebra in the paediatric cervical spine. In this issue, Agarwal et al. report the short-term outcome in 22 children (mean age, 9.1 years) after one-year antitubercular multidrug treatment for tuberculosis of the cervical spine. The study shows excellent clinical outcome with chemotherapy alone in 86% of patients and reversal of neurological impairment in all 3 affected patients. This finding is consistent with a Cochrane Database Systemic Review, guidelines of the Royal College of Physicians (which demonstrated no additional benefit of surgical debridement or resection of the spinal focus and bone grafting on top of chemotherapy, compared with chemotherapy alone), and a report from the Medical Research Council Working Party on Tuberculosis of the Spine (which showed 24 of 30 patients in one study and 74 of 85 patients in another in Korea had complete resolution of myelopathy and function after medical treatment).

Agarwal et al. reported that the only obvious complications were kyphosis (n=2), kyphoscoliosis (n=1), and scoliosis (n=1) attributed to contiguous multilevel involvement at the mid-cervical or cervicodorsal region. The period of immobilisation was only 6 to 8 weeks, and it was unclear how this was decided. It was also unclear about the protocol used to diagnose patients, the follow-up regimen, compliance to long-term antitubercular drug treatment, side-effects to medications and their management, and whether all patients had magnetic resonance imaging to correlate clinical and radiological outcome.

Tuberculosis of the cervical spine accounts for 3% to 5% of all spinal tuberculosis. Its involvement in children is rare, and the diagnosis is often missed; thus a high index of suspicion is needed. Indications for surgery include acute swallowing or breathing emergency, doubtful diagnosis, non-responders, severe or progressive neural deficits (especially with mechanical compression), dynamic instability, and progressive kyphosis. Surgery may be required for a small subset of patients with these problems. It is important to note that all 3 patients with multiple body involvement developed kyphosis, and thus such patients and those with erosive lesions of >50% of the height of the vertebra, wedge monovertebra, and fused anterior wedge block vertebra should be closely monitored to determine the need for surgery. In children with spontaneous fusion, kyphosis, or kyphoscoliosis, long-term follow-up until adulthood is necessary, as the deformity is most likely to worsen over the years.

REFERENCES