

EDITORIAL

Surgical Intervention in Spinal Tuberculosis

TB is one of the oldest diseases in human history. TB found in 5000 year old Egyptian mummies. According to WHO 10 million people fall ill from TB in each year and 1.8 million died in each year. At present approximately 30 million world people suffering from TB.

Skeletal TB constitute 3-5% of all TB .50% of skeletal TB are vertebral. In 1779 Percival pott's first described vertebral TB and as per his name it is called pott's disease. Pott's disease is more common in first 3 decades though no age is immune. The disease is equally distributed among both sexes.

Skeletal TB is mostly caused by *M. tuberculosis* of human type and *M. bovis*, but it can be caused by others atypical mycobacterium. Pott's disease is always secondary from primary source. Rout of spread are mainly hematogenous

TB is more common in developing country. Bangladesh ranking is 7 th all over the world. Secondary TB present with dangerous type of complication like neurological defecit,kyphosis,scoliosis or bowel bladder involvement.

Various clinical problems observed include: (1) TB spine with active disease with severe kyphosis with or without paraplegia; (2) TB spine with healed disease with severe kyphosis with or without late onset paraplegia; (3) a case of suspected TB spine; (4) TB spine presenting with atypical clinical presentation or location of lesion, thus more liable to present with neural complications; (5) TB spine caused by a multidrug resistant organism; and (6) dual disease, i.e. TB spine in an HIV-positive patient.90 % of TB spine presents with severe pain,50% with neurological defecit,50 % with constitutional symptoms.

Orthopaedic surgeons must be educated and trained to look for spinal tuberculosis during the most elementary examination, i.e. plain radiographs, and use modern imaging judiciously to diagnose and treat TB spine in a "pre-destructive stage" to achieve healed status with no or minimal deformity, while at the same time treating advanced cases of varying severity.

Despite the most sophisticated imaging, 5% to 10% of the cases which look like TB may not be. Thus, if the patient does not fit into the classic picture, an attempt should be made to establish the tissue diagnosis.

TB spine is a medical disease. Surgery is indicated for neural complications, deformity correction, instability and in diagnostic dilemma. In spinal TB patients with paraplegia with little or no kyphosis, treatment consists of surgical decompression to achieve neural recovery.

The goal of surgery is to eradicate the disease vertebrae, decompression, stabilization and fusion. Selection of surgical approach is very important in Pott's disease for proper drainage, decompression and stabilization.

In cervical spine mainly anterior approach is most preferable. In dorsolumbar tuberculosis initially anterior and anterolateral was done by thoracoabdominal approach but in this procedure potential complications are more.

Nowadays posterior surgery is most popular because instrument aided multi segmental posterior stabilization is most reliable for correction, stabilization and fusion. In posterior approach long segment correction along with 360 degree decompression is possible. At the same time from posterior approach both anterior and middle column reconstruction is also possible.

Significant number of spinal tuberculosis can be treated conservatively. So proper dose of anti TB drugs should be continued up to 12-18 months.

Proper selection of patient is crucial. Proper selection and proper instrumentation is a key to achieve biological union with regaining of neurological deficit.

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