Medical Management Of Spinal Tuberculosis

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Tuberculosis is a disease with increasing incidence. These could be attributed to the increased in those with immunocompromised conditions like advanced diabetes mellitus, chronic organ failure or HIV infection. Predominantly an infection of the lungs, it can involve the spine in 3-5% of all tuberculosis patients.

Although many authors advocated surgical intervention for patients with spinal tuberculosis, anti tuberculosis therapy is still the main state of treatment for TB infection. It has drastically reduce the mortality rate of tuberculous infection.
According to the 13th report of the MRC working party on TB of the spine, anti tuberculosis therapy only achieve a favourable outcome in 87% of patients. Those with significant neurological deficit was excluded in the study. However, fusion rate differ significantly between those received antibiotics only and those underwent surgical debridement and bone grafting.

Paradoxical response occurs in about 15% of patients treated with anti-TB treatment. The risk is higher in those associated with HIV infection. Immune Reconstitution Inflammatory Syndrome (IRIS) is a diagnosis of exclusion. Poor treatment response or treatment failure could be due to patient in compliance, drug malabsorption or drug resistance.

Resistant strains of Mycobacterium tuberculosis is on the rise. Resistant to Isoniazid, Rifampicin and even Pyrazinamide have been reported. Resistance to individual anti-TB drug or multiple drugs can occur. Second-line drugs such as Streptomycin, Fluoroquinolones and others have been used in these situations. Newer more potent agents promise to shorten duration of treatment and reduce failure.

6-9 months treatment regimes containing Rifampicin has been the gold standard in spinal tuberculosis. Although some would recommend 12 months regime in the presence of extensive orthopaedic implants.

Ambulatory care is proven to be as effective as the use of brace.