Sp36: In Patients Undergoing Surgery for Correction of Healed Post-TB Spinal Kyphosis, Is There a Need to Give Preoperative ATT to Prevent Recurrence of the Disease?

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Recommendation: Preoperative antitubercular therapy (ATT) is not routinely recommended for patients undergoing corrective surgery for healed post-tuberculosis spinal kyphosis in the absence of active infection, incomplete prior treatment, or immunosuppression.

Level of Evidence: Consensus

Delegate Vote

Rationale: There are several small studies focusing on whether preoperative ATT can prevent recurrence of the healed post-TB spinal kyphosis. According to our clinical experience, for patients undergoing corrective surgery for healed post-tuberculous spinal kyphosis, the need for preoperative antitubercular therapy (ATT) requires comprehensive evaluation. First, the healed status of the tuberculosis lesion must be confirmed, including the absence of clinical symptoms (e.g., fever, night sweats), normalized inflammatory markers (ESR/CRP), and imaging evidence of quiescent disease (no active bone destruction or abscess on CT/MRI). Patients who completed a standardized ATT regimen (≥9 months) with no recurrence typically have a low reactivation risk (1-2%) and may not require preoperative prophylaxis. However, those with incomplete prior treatment or treatment interruptions should restart ATT for 4-6 weeks before surgery[1].

Surgical risk factors significantly influence decision-making. Intraoperative exposure of vertebral tissues may reactivate dormant mycobacteria, while implanted hardware increases biofilm-related infection risks. For cases involving internal fixation or extensive soft tissue dissection, postoperative ATT continuation for 3 months (isoniazid 5 mg/kg/day + rifampicin 10 mg/kg/day) is recommended. Immunocompromised patients (e.g., diabetes, chronic steroid use) should initiate ATT 1 month preoperatively to mitigate perioperative risks.

Final decisions should be individualized through multidisciplinary consultation (spine surgery, infectious disease, radiology). Key considerations include preoperative TB activity, immune status, surgical invasiveness, and patient compliance, balancing therapeutic benefits against adverse drug effects to optimize outcomes.

References:

1. [Anonymous]. WHO Guidelines Approved by the Guidelines Review

Committee. In the WHO consolidated guidelines on drug-resistant tuberculosis treatment. Geneva: World Health Organization