

Evidence Update

Tuberculosis Series

Should every patient with uncomplicated TB of the spine have surgery?

It is not known whether routine surgery is appropriate for people with spinal tuberculosis.

Inclusion criteria

Studies:

Randomized controlled trials with at least one year follow up from the start of treatment.

Participants:

People diagnosed with active tuberculosis of the thoracic spine, lumbar spine, or both, including the upper sacral vertebra S1.

Intervention:

Chemotherapy plus surgery compared with chemotherapy alone.

Outcomes:

Primary: worsening spinal curvature; neurological deficit.

Secondary: pain; bony fusion; absence of spinal tuberculosis; death from any cause; regained activity level; bone loss.

Adverse events.

Results

- Two trials were included, with a total of 331 participants. Allocation concealment was adequate in both trials.
- No differences were detected between groups in the number of participants with clinically significant worsening of the spinal curvature after five years (144 participants, 2 trials), and fusion between the vertebrae and absence of spinal tuberculosis on an x-ray after various times of follow up.
- No difference was detected in the number of people regaining previous activity levels after 18 months (2 trials), or 5 or 10 years (1 trial).
- No trials measured pain.
- Reported adverse events of surgery were an operation in the wrong place in one participant and seven graft failures.

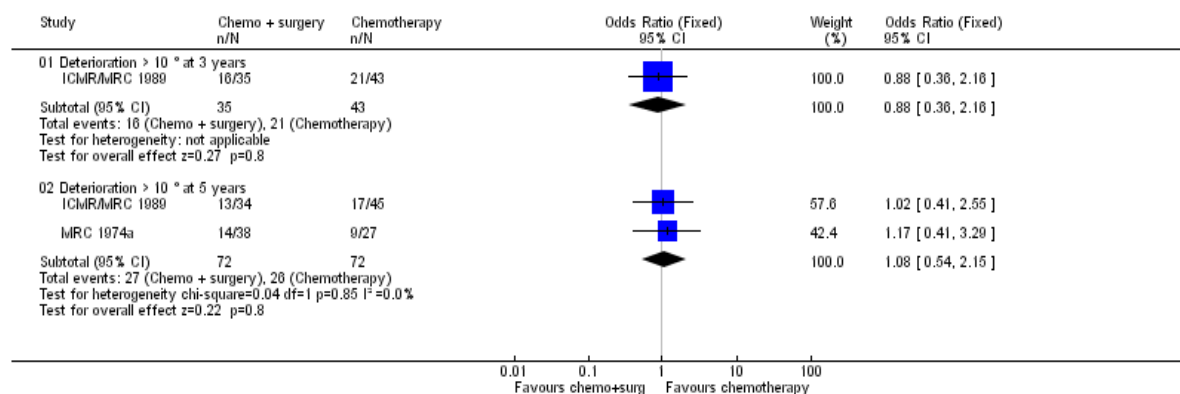


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Chemotherapy plus surgery versus chemotherapy alone for spinal tuberculosis: clinically significant increase in spinal curvature



Authors' conclusions

Implications for practice:

It is not known whether routine surgery is appropriate for people with spinal tuberculosis.

Implications for research:

Future trials should assess routine surgery and also address specific subgroups of patients with spinal tuberculosis to establish the role of surgery for specific indications. These trials should be large enough to assess outcomes properly and need to assess issues such as pain and the patients' view of their disease and treatment.