

ONE STAGE RECONSTRUCTION SURGERY WITH ANTERIOR AND POSTERIOR INSTRUMENTATION TECHNIQUE FOR TREATING KYPHOSIS TUBERCULOSIS

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Introduction:

Commonly, two stages combined anterior - posterior approaches were performed to treat significant kyphotic deformity, but potentially increase morbidity level. Recently, single - stage posterior approach for anterior column reconstruction have shown sagittal alignment improvement. The objective of this study is to describe radiology and clinical outcomes of kyphotic deformity patients who were treated using one stage reconstruction surgery for posterior and anterior instrumentation in kyphotic tuberculosis patients.

Materials and methods:

Data collected from kyphotic deformity patients who treated with one stage reconstruction surgery around 3 years period. In addition, this technique could address kyphotic correction.

Results:

42 patients were reported, the mean age was 39.1, 19 males and 23 females. Procedures performed with lateral extracavitary approach. The mean estimated blood loss and length of surgery were 1190 ml and 194 minutes. The mean Pre operation local kyphotic angle was 69.1°, and regional kyphotic angle was 49.5°. The mean Post operation local kyphotic angle was 23.9°, and regional kyphotic angle was 16.8°. All of the patients have good clinical outcomes, with mean 1 year post operation VAS of 0.3 and ODI of 6.7. Three patients had post operative neurological deficit hypoesthesia.

Conclusion:

Lateral extracavitary approach for anterior column reconstruction and posterior instrumentation is a viable alternative method to treat kyphotic deformities. This surgical procedure will produce a good alignment, strong fixation, better fusion, and reduced morbidity with one stage surgery.

Keywords:

one stage surgery, lateral extracavitary approach, kyphotic tuberculosis