

## Original Article

## EFFICACY OF CLOSED SUCTION DRAINAGE IN ANTERIOR SPINAL FUSION FOR LUMBAR SPINAL TUBERCULOSIS

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**Abstract** [Objective] Recently, the effectiveness of closed wound drainage has been evaluated for various types of orthopedic surgery. Some studies showed insufficient evidence to support the routine use of a drain. In the current analysis, the efficacy of closed suction drainage in anterior spinal fusion for lumbar spinal tuberculosis was retrospectively evaluated. [Patients and Methods] Ninety-one consecutive patients treated from January 1997 to January 2016 were included. Before 2006, a closed suction drainage system was placed immediately before wound closure (31 patients). From 2007, no drain was used (60 patients). The two groups of patients were compared regarding postoperative laboratory data (hemoglobin, albumin, and C-reactive protein [CRP]), postoperative complications (deep hematoma, paralysis, wound infection, wound healing, and wound discharge), and healing of the tuberculous lesion. [Results] There were no significant differences in decrease of hemoglobin and albumin between the second and seventh postoperative day. On the other hand, CRP showed a significantly smaller decrease in patients treated with a drain. Deep hematoma and postoperative paralysis were not detected in either group. Surgical site infection was detected in two patients with a drain. Delayed wound healing was noted in three patients with a drain and one patient without a drain. Persistent discharge was noted in nine patients with a drain. All patients showed excellent healing of the tuberculous lesion. [Conclusion] Comparison between patients with and without a suction drain did not show any definite advantage of drainage. Therefore, the routine use of a drain in anterior spinal fusion for lumbar spinal tuberculosis is not recommended.

**Key words** : Spinal tuberculosis, Drainage, Postoperative complication