

Experience in the surgical management of spontaneous spinal epidural hematoma

Liao Cheng-Chih, Lee Shih-Tseng, Hsu, Wen-Chin, Chen Li-Rong, Lui Tai-Ngar, Lee Sai-Cheung

Object: Spontaneous spinal epidural hematoma (SSEH) is a rare disease entity.

Although many cases have been reported in the literature, controversy persists as to its origin, diagnosis, and timing of treatment. The authors conducted a study in patients treated in their hospital and report the results.

Methods: Clinical data obtained in 35 patients with SSEH were retrospectively reviewed. Age, sex, history of hypertension, and history of anticoagulation therapy were recorded, and data were analyzed to clarify the possible predisposing factors of SSEH.

Neurological outcomes were reappraised using a standardized grading system and correlated with the time interval from initial ictus to surgery, duration of complete neurological deficits, and the rapidity of deterioration of paralysis. Nonparametric methods and Spearman rank-correlation coefficients were used for statistical analysis.

Conclusions: Surgery is a safe and effective procedure to treat SSEH. The disease-related mortality rate was 5.7%, the surgery-related complication rate is 2.9%, and there were no operation-related deaths. Neurological outcome after surgery is positively correlated with preoperative neurological deficits (88.9% complete recovery in patients with incomplete neurological deficits compared with 37.5% in those with complete deficits [$p < 0.001$]). In patients in whom the time interval from initial ictus was shorter (< 48 hours) and in whom the duration of complete neurological symptoms was also briefer (< 12 hours), there is a positive correlation with better neurological and functional recovery ($p < 0.05$).

Editor's Comments: