Surgical management of spontaneous spinal epidural hematoma: a medical center experience

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Objective. Spontaneous spinal epidural hematoma (SSEH) is a rare disease. The goal of this study was to clarify the treatment results and management options in SSEH.

Methods. Patients with SSEH who were surgically treated in the authors' center between Jan. 1995 to Aug. 2012 were included in this study. We reviewed age, gender, hypertension, anticoagulant use and the preoperative neurological status using the ASIA Impairment Scale by examining medical records, operative records, pathology reports, and radiographies, retrospectively. Patients were treated as early as possible if their neurological deficits were incomplete or had been complete for 12 hours or less. The neurological outcome and the period between episode and surgical intervention were also analyzed.

Results. From Jan. 1995 to Aug. 2012, 17 cases (6 male and 11 female) with SSEH in our institute were reviewed . Mean age is 40.4 years old. Five hematoma were located in the cervical region , two were located in the cervicothoracic, seven were thoracic and three was in the thoraclumbar region. There was a statistically significant difference between the incomplete and complete neurological injury for the preoperative status (P<0.05). The neurological outcome was good in those cases that had their hematoma removed within 24 h (P<0.05). The patients with incomplete neurological injury who had a surgical operation performed within 12 h had an excellent surgical outcome (P<0.01). Patients with incomplete preoperative deficits (ASIA Impairment Scale Grades B, C, and D) were able to achieve functional independent recovery within a month after surgery and had significantly better outcomes.

Conclusions. Spontaneous spinal epidural hematoma was favorably treated by the means of a surgical operation. The favorable factors for SSEH operations were incomplete neurological injury at the time of the preoperative status and the short operative time interval.

Topic:

Spine Vascular Trauma Neurointensive Care Infection

Peripheral Nerves Tumor Functional Skull Base

□Intraoperative monitoring & imaging □Basic neuroscience □Hydrocephalus

□ Pediatrics □ Interventional

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