

EPIDURAL HEMATOMA AS A RARE COMPLICATION AFTER ANTERIOR CERVICAL AND FUSION DISCECTOMY

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Introduction: Spinal epidural hematoma (SEH) after cervical spine surgery is a relatively rare complication, but it is so severe that it can lead to permanent disability of the patient and even death.

Methods: We performed a standard C5-7 anterior microdiscectomy with fusion (ACDF) in a 39-year-old patient without any complications. Four hours after surgery, the patient began to complain of progressive quadraparesis. Acute magnetic resonance (MR) diagnosed SEH C6-Th2. Immediately revision operation with level C7/Th1 extension was performed and haematoma removed. Two years after the operation patient has mild paresis of the left lower limb and the neurogenic bladder.

Discussion: 39 cases are described in modern literature so far. The incidence of SEH after ACDF is approximately 1 in 1,000 surgeries with an incidence of 0.1-0.24%. The most common sources of epidural hemorrhage are considered to be the radicular arteries, posterior longitudinal ligament arterioles, venous plexus (Batson's) or spongiosis bleeding. The cited risk factors are: sudden increase in intra-abdominal pressure after surgery (cough, sneezing, snorting, etc.), ASA score > 3, smoking, perioperative losses greater than 1000ml, ethylism and more than three-level operation. Clinical symptoms occur on average within 4 hours after surgery. MR imaging should be prompt and followed by the fastest possible surgical revision. Most SEH are multi-level and hematomas are extended to non-operated stages. Existing approach is recommended for revision surgery, while extension of the level, somatectomy or implantation of drainage are possible procedures of choice. Any dorsal decompression from the posterior approach may be included in the second period.

Conclusion: When postoperative SEH is suspected, time is of the essence. The spread of SEH to non-operated segments can lead to an error and an insufficient range of revision in case of insufficient diagnosis. Therefore, it is always recommended to perform MR as soon as possible. Approximately 60% of patients have a complete restoration of the neurological lesion within six months.