Remote cerebellar hemorrhages in spinal surgery: a single institution’s experience.

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Submission ID: 42194
Disclosures

• The authors report no disclosures or conflicts of interest.

• The views expressed in this presentation are those of the authors, and do not necessarily reflect the official policy or position of the Department of the Army, Department of the Navy, Department of Defense, or the U.S. Government
Introduction

• Remote cerebellar hematomas are a rare complication of spinal surgery.

• They typically occur in the setting of CSF leak and the presence of closed-suction drain post-operatively.
Methods

• Records were reviewed over a 6-year period for instances of remote cerebellar hemorrhages associated with spinal surgery.
Results

• Over a seven-year period, 3,566 spinal decompression procedures were performed by full-time staff at a single institution.

• Three remote cerebellar hematomas were identified (0.08%).
Results

• In each instance, a CSF leak was incurred intra-operatively, and a closed-suction drainage system was used post-operatively.

• In all patients, head CT was obtained for complaints of increasing headache, with altered mental status in one patient.

• Ventriculostomy was placed in one patient. No patient required evacuation of the hematoma, and all recovered fully.
Results

Figure 1: Superior cerebellar and vermian hemorrhage on post operative day 5 following thoracolumbar deformity correction
Results

Figure 2: Repeat non-contrasted head CT 2 months post operative showing resolution of cerebellar hemorrhage.
Discussion

• Remote cerebellar hematoma is a rare complication of spinal surgery.

• It is associated with durotomy and use of closed-suction drainage.

• The clinician should maintain a low threshold to obtain a CT scan of the patient’s head in the setting of worsening headache, altered mental status, or focal neurologic deficit in the post-operative period.
Summary Points

• Remote cerebellar hemorrhages are rare.

• They can be heralded by headache and altered mental status in a patient that experienced a durotomy.

• Outcome is generally good.