Intracranial pressure monitor placement by midlevel practitioners.

Kaups KL, Parks SN, Morris CL.

University Medical Center, University of California, San Francisco/Fresno Campus, 93702, USA.

BACKGROUND: The timely treatment of patients with head injuries is affected by the availability and commitment of neurosurgeons. Use of midlevel practitioners (MLPs) may permit more efficient neurosurgical coverage. Intracranial pressure monitoring is among the most frequently used neurosurgical procedures. The purpose of this study was to examine the placement of intracranial pressure (ICP) monitors by MLPs. METHODS: Medical records and trauma registry data for a Level I trauma center were reviewed from December 1993 to June 1997. Patients who had ICP monitors placed were included. Patient data recorded were age, mechanism of injury, injury type, ICP monitor placement and length of placement, complications related to the ICP monitor, and outcomes. RESULTS: Two hundred ten patients had 215 monitors placed. ICP monitors were placed by neurosurgeons (105), MLPs (97), and general surgery residents (13), and remained in place a mean of 4 days. No major complications attributable to ICP monitor placement occurred; 19 minor complications (malfunction, dislodgment) were noted. Eleven monitors placed by neurosurgeons (10%), seven placed by MLPs (7%), and one placed by a resident (8%) had complications. CONCLUSION: ICP monitor placement by MLPs is safe. Use of MLPs may aid neurosurgeons in providing prompt monitoring of patients with head injuries. PMID: 9820697 [PubMed - indexed for MEDLINE]