

the tumor resection, there was a mild decrease in SSEP (<10%) and there was no change in TcMEP. Also, postresection intact triggered EMG was elicited in the muscle groups. This is the first such report on use of TcMEP and SSEP.

Conclusion: TcMEP and SSEP can be used in tumors on peripheral nerves where nerve action potentials are not feasible.

Keywords: sciatic nerve tumor, transcranial motor evoked potentials, somatosensory evoked potentials

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A005 Effect of Intra-arterial Nimodipine on Cerebral Oxygen Saturation and Cardiac Indices in Patients with Cerebral Vasospasm after Aneurysmal Subarachnoid Hemorrhage

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Introduction: Delayed cerebral ischemia from vasospasm results in morbidity and mortality after aneurysmal subarachnoid hemorrhage (aSAH).¹ Intra-arterial nimodipine (IaN) relieves symptomatic vasospasm after aSAH with both angiographic and neurological improvement.² However, hypotension is common during IaN treatment and can result in cerebral hypoperfusion thus negating the net benefit. This study aimed to assess the effect of IaN on cerebral oxygen saturation (cSO₂) and cardiac indices during IaN therapy for cerebral vasospasm.

Methodology/Description: The ISNACC-funded prospective cohort study was conducted in 17 patients over 16 months after ethics committee approval and informed consent. Patients with neurological/angiographic evidence of vasospasm received IaN (3 mg over 20 minutes) in the spastic vessel. The cSO₂, heart rate, mean blood pressure (MBP), and cardiac indices (cardiac index [CI], stroke volume index, stroke volume variation, and systemic vascular resistance index [SVRI]) were recorded from baseline until completion of IaN treatment.

Results: The mean age and BMI was 52.7 (10.8) years, 24.2 (3.6) kg/m², respectively. On paired *t*-test analysis, mean change in ipsilateral and contralateral cSO₂ (%) after IaN was not significant (0.13 ± 3.7 [$p = 0.89$] and 1.3 ± 5.4 [$p = 0.37$], respectively). After IaN, mean change in diameter (mm) of spastic vessel was significant (0.48 ± 0.47 ; $p = 0.007$), but not in contrast transit time (sec; 1.3 ± 2.2 ; $p = 0.08$). Significant decrease in MBP (mm Hg) and SVRI (dyne*sec/cm⁻⁵/m²) and increase in CI (L/min/m²) were noted after IaN (mean change 13.8 ± 11.8 ($p < 0.001$), 685 ± 644 ($p = 0.001$), and 0.62 ± 0.56 ($p = 0.002$), respectively).

Conclusion: IaN resulted in dilation of spastic vessel without change in cSO₂. Cardiac indices changed significantly with IaN.

Keywords: aneurysmal subarachnoid hemorrhage, IaN, SVRI

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A006 Comparison of Two Infusion Doses of Dexmedetomidine on Perioperative Hemodynamics and Recovery Characteristics in Patients Undergoing Endoscopic Pituitary Decompression Surgery:

A Randomized, Prospective, Single-Blind Study
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Introduction: Endonasal transsphenoidal resection of pituitary tumor involves wide fluctuation in hemodynamic parameter due to intense noxious stimulus at various stages of surgery. None of routinely used anesthetic agents effectively blunts undesirable hemodynamic responses with favorable recovery. Dexmedetomidine significantly attenuates the hemodynamic responses and maintains intraoperative cardiovascular stability which depends on its concentration. Primary aim of this study is to compare maintenance of hemodynamic stability and recovery characteristic between 0.5 and 0.7 µg/kg/h infusion doses of dexmedetomidine.

Methodology/Description: Study was conducted after obtaining approval from Institutional Review Board. Sample size of 42 patients (21 + 21) was determined using “MedCalc” and patients were randomized into one of the two arms based on computer-generated random numbers. Hemodynamic parameters and recovery characteristics were noted at various time intervals. Results were analyzed by ANOVA.

Results: Both groups were comparable in terms of demographic characteristics. There was statistically significant difference in hemodynamic parameters at all the mentioned time interval between Group D0.5 and Group D0.7, with patients in Group D0.7 being more stable. Recovery characteristics also showed statistically significant difference, that is, extubation time being 13.35 ± 2.47 and 20 ± 3.88 minutes in Group D0.5 and Group D0.7, respectively.

Conclusion: Use of dexmedetomidine infusion in endonasal pituitary decompression surgery offered equivalent hemodynamic stability and an optimal surgical field at both the infusion regimes without any hemodynamic complications. However, the recovery characteristics were significantly desirably faster with the lower concentration