

Introduction: Subarachnoid haemorrhage (SAH) in patients with coarctation of aorta (CoA) is uncommon but well documented. Management in anaesthesia and in intensive care unit (ICU) must involve monitoring and management of perfusion in both pre-stenotic and post-stenotic circulation. We report a case of SAH in a patient with CoA who developed post-stenotic hypotension and its complication despite adequate pre-stenotic perfusion. **Case Summary:** A 41 year old hypertensive male was admitted with complaints of sudden headache, vomiting and palpitation of 1 day duration and blood pressure (BP) of 210/108 mmHg. Non-contrast computerised tomography head showed SAH. Cardiac evaluation showed complete stenosis of descending thoracic aorta just distal to the origin of left subclavian artery with post-stenotic refilling through intercostals. Anterior communicating artery aneurysm was seen on magnetic resonance (MR) angiography. Aneurysm was coiled through right carotid approach under general anaesthesia. Left radial artery was cannulated for invasive BP monitoring. Intraoperatively filling of the aneurysm and formation of thrombus was observed. Intra-arterial eptifibatide was administered and patient extubated keeping systolic BP 20% below baseline. He was maintained on same BP in ICU for next 48 hours. On third postoperative day the patient developed paraplegia and bowel distension. Urine output was normal. MR imaging revealed central intramedullary acute ischemic changes from conus medullaris upto D8 level. **Conclusion:** CoA is essentially two parallel circulations comprising of pre-stenotic and post-stenotic component. This case report underscores the importance of monitoring both components during management in anaesthesia and in ICU.

ISNACC-S-07

Direct motor evoked potentials and cortical mapping using the NIM nerve monitoring system: A technical note

S. Bharadwaj, F. Haji¹, M. Hebb¹, J. Chui²

Department of Neuroanaesthesia and Critical Care, NIMHANS, Bengaluru, Karnataka, India, ¹Departments of Neurosurgery and ²Neuroanaesthesia, University of Western Ontario, Canada

Introduction: Motor evoked potentials (MEPs) are commonly used to prevent neurological injury when operating in close proximity to the motor cortex or corticospinal pathway. We report a novel application of the NIM nerve monitoring system (Medtronic@ NIM response 3.0) for intraoperative direct cortical (dc)-MEPs monitoring. **Case Summary:** A 69-year-old female patient presented with a 4 month history of progressive left hemiparesis resulting from a large right sided posterior

frontal meningioma that abutted and compressed the motor cortex. Motor cortical mapping and MEPs were indicated. The patient was anesthetized and maintained on total intravenous anesthetics. Compound muscle action potentials (CMAP) of the right upper limb were monitored using the NIM system. After a craniotomy was performed, we first used the Ojemann stimulator (monopolar) for dc-stimulation and then switched to use the monopolar nerve stimulator probe of the NIM system. The CMAP response was successfully elicited using the NIM stimulating probe (pulse width = 250 s, train frequency = 7 pulses/s, current = 20 mA). A gross total resection of the tumor was achieved with intermittent cortical mapping of MEPs. There were no intraoperative complications and the patient's motor function was preserved after the surgery. **Conclusion:** We conclude that the NIM nerve monitoring system is a feasible alternative to standard neurophysiological monitoring systems.

ISNACC-S-08

Benign intracranial hypotension: An unusual presentation with bilateral subdural hematoma and successful management with epidural blood patch

P. C. Bharamagoudar, S. Marajakke¹

Departments of Neuroanaesthesia and ¹Neurosurgery, Siddhagiri Advanced Neuroscience Centre and Research unit, Siddhagiri Hospital and Research Centre, Kaneri, Kolhapur, Maharashtra, India

Introduction: Benign intracranial hypotension is characterized by orthostatic headache, nausea, vomiting, tinnitus, vertigo, diplopia and wide variety of symptoms. It is mainly because of CSF leakage which can be caused by trauma, epidural analgesia, dural puncture but in most of the cases it is spontaneous. Rarerly patient will present with subdural hematoma. In that cases proper history, meticulous investigations, high index of suspicion and appropriate management will be required. Here we are presenting a case who presented with bilateral subdural hematoma because of benign intracranial hypotension managed successfully with epidural blood patch and evacuation of hematoma. **Case Summary:** Forty year male patient presented to casualty with orthostatic headache, vomiting since 1 month and altered sensorium, giddiness since 2 days. There was no history of trauma. MRI brain showed prominent subdural hematoma in the late subacute stage in right frontotemperoparietal region with mass effect associated with thin subdural hematoma on left side. There was mild inferior displacement of floor of third ventricle which was draping along the dorsum sellae. There was associated effacement of prepontine cistern. There was mild compression and distortion of bilateral cerebral peduncles. These findings were suspicious of benign