for DSA within 2 hours of onset of symptoms under general anaesthesia which revealed complete stenosis of supraclinoid ICA. Patient underwent thrombolysis. Good collaterals achieved. Patient shifted to ICU onmechanical ventilation. No neurological deficit postoperatively. **Conclusion:** Anaesthesiologists not only play an integral part of the stroke team but also in maintaining optimum haemodynamics during intervention.

ISNACC-S-11

Assessment of hemodynamic and cerebrovascular changes after administration of mannitol in postoperative neursurgical patients: A combined transthoracic echo and transcranial Doppler study

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Introduction: Mannitol is commonly used in neurosurgical units to reduce intracranial pressure. It has effects on both cardiovascular and cerebral hemodynamics. The temporal sequence of cardiovascular and cerebrovascular effects of mannitol has not been studied. This study assesses the hemodynamic and cerebrovascular changes using combined transthoracic and transesophageal echo after administration of mannitol in postoperative neurosurgical patients. **Methods:** The study was approved by ethics committee. Adult patients who were admitted in neurosurgical ICUs for surgical removal of intracranial tumors were included in the study. TCD and TTE findings were recorded on day 1 and day 2 following administration of 0.5 g/kg of mannitol. Comparison was made between operated and non operated side. Appropriate statistical analysis was done to assess the effects of mannitol on cardiovascular and mean flow velocity in middle cerebral artery blood flow. **Results:** HR, MAP, SPO2 showed no change after mannitol use. Mean flow velocity increased in both operated and non operated side but more in non operated side. Pulsatality index decreased from baseline but was not statistically significant. Resistance index also did not decrease in both sides. The estimated CPP was significantly increased at 5 mins on operated side upto 15 mins post mannitol use. There was no significant change in mean flow velocity, pulsatality index and resistance index ICP on second day. The ECHO variables like left ventricular dimensions, stroke volume and cardiac output did not change significantly following mannitol infusion. **Conclusion:** Adminstration of 0.5 g/kg of mannitol in immediate postoperative period was associated with increase in the mean flow velocity without change in cardiovascular variables. However the cerebrovascular effects was not seen significant change from baseline on second postoperative day. Our result may have an impact on the management of these patients in the neurocritical care.

ISNACC-S-12

Persistent hypertension after posterior fossa surgery: A case series

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Introduction: Association between medullary compression and hypertension in posterior fossa tumors is well known. We report two unusual cases where patients developed hypertension following posterior fossa surgery requiring high dose antihypertensives. **Case Summary:** Case 1: A 4 year old male child, operated for medulloblastoma and ventriculoperitoneal shunt three months back, was readmitted. He was treated for bacterial meningitis and shunt was revised. He later developed seizures requiring tracheal intubation. He subsequently developed hypertension (SBP 150-180 mmHg, DBP 95-110 mmHg) which could not be controlled with intravenous labetolol and sodium nitroprusside. Head and spine MRI revealed leptomeningeal tumor spread involving midbrain, pons, medulla (lateral and dorsal region) and upper cervical spine and the patient died 6 days later. Case 2: A 2 years old male child, diagnosed with medulloblastoma, was posted for tumor excision. Ventriculoperitoneal shunt surgery was performed 15 days back. Preoperative vitals were stable with no history of hypertension. In immediate postoperative period, patient developed persistent hypertension (SBP 140-160 mmHg and DBP 90-110 mmHg) which was not controlled with labetalol infusion and enalapril. Head and spine MRI revealed residual tumor with oedema involving medulla and significant portion of spine. Child later had seizures, deteriorated neurologically and succumbed to death after one month. **Conclusion:** New onset postoperative hypertension is unusual and rare following medulloblastoma excision. Probable cause is medullary compression, due to residual tumor and edema in the early postoperative period or tumor spread in the later period. It is difficult to control even with multiple antihypertensive drugs and is a poor prognostic indicator.

ISNACC-S-13

Description of a novel literature search methodology and its validation against PubMed

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