

the groups at all time intervals. **Conclusion:** Plasmalyte A is a better alternative to 0.9% saline as intravenous fluid in neurosurgical procedures as it produces lesser acidosis and maintains serum chloride levels.

#### ISNACC-S-36

##### A rare entity of intra-arterial embolism in neurointerventional suite

S. Lachala, S. Anand, A. Chakravarty

Department of Anaesthesia, Artemis Hospitals, Gurgaon, Haryana, India

**Introduction:** Symptomatic arterial embolism during neurointerventional procedures is a rare complication which can result in catastrophic consequences. We report a rare case of arterial embolism during endovascular coiling of basilar top aneurysm in a patient, who developed cardiac arrest intraoperatively and developed complication after cardiopulmonary resuscitation and was managed successfully. **Case Summary:** A 79 years old woman who was undergoing elective endovascular balloon assisted coiling of an unruptured large basilar top aneurysm suddenly had a fall in end-tidal CO<sub>2</sub> followed by cardiac arrest. The occurrence of arterial air embolism was simultaneously alerted by the neurointerventionist. Cardiopulmonary resuscitation with 100% FiO<sub>2</sub> and high PEEP was started and the patient was revived successfully. Post resuscitation she was shifted to Intensive care unit (ICU) on high inotropic support. In ICU she was observed to be pale. Her haemoglobin in ABG was found to be 5.4 g%. Bedside ultrasonography revealed haemoperitoneum. Contrast computerised tomography of chest and abdomen was done which showed hepatic artery branch bleed. Glue embolisation of the ruptured artery was undertaken immediately. Subsequently she made uneventful recovery with no neurological deficit and was discharged in a stable condition. **Conclusion:** High index of suspicion of arterial air embolism is required during neurointerventional procedures. Its prompt diagnosis and appropriate management are needed to avoid major permanent neurological deficits and mortality.

#### ISNACC-S-37

##### Oral pregabalin reduces VAS score in patients with acute aneurysmal subarachnoid haemorrhage

K. R. Lionel, S. Manikandan

Division of Neuroanesthesia and Neurocritical Care, SCTIMST, Trivandrum, Kerala, India

**Introduction:** Patients with acute aneurysmal subarachnoid haemorrhage (aSAH) usually present with excruciating headache. Since pain activates

the sympathetic system and contributes to various complications including aneurysmal re-bleed, pain control in these patients is vital in the perioperative period. Pregabalin ( $\beta$ -isobutyl-GABA) is recognized to have analgesic, antiepileptic, antiemetic and anxiolytic properties that make it an attractive adjuvant in pain management for these patients. **Methods:** We conducted a double blind, placebo controlled randomized clinical trial to assess the effect of perioperative pregabalin in decreasing anaesthetic and opioid requirement and perioperative headache in patients with aSAH undergoing aneurysmal clipping. Twenty-two WFNS grade 1-2 aSAH patients were randomized to receive either pregabalin (75 mg BD) or placebo till 24 hours post operation. Headache, assessed using a visual analogue score (VAS), at admission, prior to induction and at 6, 12 and 24 hours post-operatively were compared using a Mann-Whitney test. **Results:** We present the interim analysis of 22 participants recruited to date. Pregabalin recipients had a significantly greater decline in VAS between admission and pre-induction (-4.18 vs -1.82;  $p = 0.008$ ); lower VAS at 12 hours post-op (3.73 vs 4.75;  $p = 0.035$ ) and required fewer rescue analgesics in the 24 hours following surgery (0.64 vs 2.1;  $p = 0.002$ ). **Conclusion:** Data from this interim analysis suggests that pregabalin significantly decreases perioperative headache and the need for rescue analgesics in aSAH. However, a larger number of participants may be required to assess its impact on decreasing the anaesthetic and analgesic requirements and to exclude potential adverse effects.

#### ISNACC-S-38

##### Comparison of pharmacological neuroprotection provided by propofol versus desflurane for long term postoperative cognitive dysfunction in patients undergoing surgery for aneurysmal subarachnoid hemorrhage

S. Mahajan, H. Bhagat, V. K. Grover, N. Panda, M. Mohanty<sup>1</sup>, N. Singla<sup>1</sup>

Departments of Anaesthesia and Intensive Care and <sup>1</sup>Neurosurgery, PGIMER, Chandigarh, India

**Introduction:** Aneurysmal subarachnoid hemorrhage (aSAH) is an acute life threatening condition with 30-40% mortality rate. Amongst the survivors, 40-50% suffers disability due to cognitive decline affecting quality of life on long term basis. The present concept of definite early intracranial aneurysm surgery poses challenges to anesthesiologist. During intracranial aneurysmal surgery, propofol and desflurane commonly used anesthetic agents. There is lack of data pertaining to anesthetic agents and cognitive sequelae following these agents. **Methods:** Randomized prospective comparative study enrolled 100 patients. Both the groups had 50 patients