

Incidence and severity of POST was assessed at 1, 6 and 24 hr and graded on four point scale (0-3). Collected data was analysed using SPSS. Fisher's Exact test and Mann Whitney U test was used to compare incidence and severity of POST among groups respectively. $P < 0.05$ was considered statistically significant. **Results:** The overall incidence of POST was 53%, where 54 (77%) in Group A and 21 (30%) patients in Group B experienced POST ($p < 0.0001$). POST was significantly attenuated at 1 hr and 6 hr in Group B ($p < 0.05$). POST occurred in 31 patients of Group A versus 6 patients in Group B at 6 hr. **Conclusion:** Magnesium sulfate nebulization significantly attenuated incidence and severity of POST in patients undergoing surgery in Prone Position.

ISNACC-S-24

Ketoacidosis in the diabetic neurosurgical patient: The steroid conundrum

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Introduction: Perioperative administration of steroids is common in patients with brain tumours. However in Diabetic patients steroids are known to rarely induce diabetic ketoacidosis. **Case Summary:** A 59 year old lady with Type-2 Diabetes Mellitus presented in the evening to the emergency with headache, dizziness, generalised fatigue and vomiting. The patient had mild confusion with GCS 14/15 but neurologically intact. Her serum glucose was 8.3 mmol/l. Emergency head CT revealed left fronto-parietal lesion with peritumoral edema and midline shift. She received stat dose of 12 milligrams dexamethasone and began phenytoin 100 milligrams 8th hourly. Later the patient vomited and dropped GCS to 11/15. She was intubated, sedated and shifted to surgical intensive care and continued on dexamethasone 6 milligram 6th hourly. Urgent craniotomy was done next morning. Intraoperatively her serum glucose was 20.5 mmol/l and ABG showed high anion gap metabolic acidosis. Her serum B-hydroxy butyrate was 2.2 mmol/l. She was managed as a case of diabetic ketoacidosis. **Conclusion:** Preoperative steroid use may possibly trigger diabetic ketoacidosis in the neurosurgical patients. Possible changes in practice for such scenarios would include a judicious approach to steroid usage in such patients and active management of diabetic ketoacidosis in any emergency diabetic patient.

ISNACC-S-25

Role of non invasive ventilation in patients with respiratory failure

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Introduction: Non invasive ventilation (NIV) refers to the delivery of ventilatory support or positive pressure into the lungs, usually through a mask avoiding complications of invasive ventilation. The aim of our study is to compare effectiveness of NIV in patients with acute hypoxemic respiratory failure over invasive ventilation (IV) and study intubation rate in patients receiving NIV, ICU stay and overall mortality, complications of invasive ventilation. **Methods:** A randomized prospective study was conducted after getting permission from ethical committee. 40 Patients eligible for the study were randomly assigned to receive either NIV or Invasive ventilation. Group A (n = 20) were given ventilatory support by NIV (BiPAP mode) by RESMED STELLAR 150 ventilator via facial mask, Group B (n = 20) were given ventilator support by IV (SIMV mode) by Hamilton C1 ventilator via endotracheal tube. GCS, APACHE score, P/F ratio, ventilatory and hemodynamic parameters were assessed on admission and monitored at 1 hour, 6 hour and 24 hours. **Results:** At 24 hr follow up intervals, mean PF ratio values were 302.99 ± 74.87 in Group A and 342.17 ± 34.73 in Group B ($t = 2.123$, $p = 0.040$). A total of 10 (50%) patients required intubation in Group A. The mean total duration of mechanical ventilation in group A receiving (BiPAP) was 3.90 ± 5.80 days compared to 9.50 ± 7.42 days in group B receiving invasive ventilator. ($t = 2.660$, $p = 0.011$). **Conclusion:** No superiority was found in either group in terms of hemodynamics and ventilatory parameters and blood gas analysis, however, use of NIV showed a significant reduction in total duration of ventilation, length of ICU stay and complications associated with invasive ventilation. NIV is useful alternative amongst patients requiring ventilator support.

ISNACC-S-26

Mannitol shower-the artefactual air embolism

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Introduction: Intraoperative venous air embolism (VAE) is one of the most dreaded anesthetic emergencies. We report a case of artefactual air embolism visualized by transesophageal echocardiography (TEE) which was in fact a shower caused by mannitol infusion. **Case Summary:** A 35-year-old male presenting for surgical excision of para-sagittal meningioma underwent