

respectively. **Conclusion:** TLC and PC do not appear to influence the density in SSS on CT scan in TBI patients—because of much higher mass of RBCs compared to WBCs and platelets. Cmean of 44.83 HU predicted Hb <10 gm/dl with good sensitivity and specificity and can be used clinically to determine need for blood transfusion if laboratory value of Hb is not available readily.

#### ISNACC-S-19

##### Coiling/clipping: The ideal treatment in Indian scenario

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**Introduction:** Cerebral Aneurysm, aneurysmal sub arachnoid haemorrhage (SAH) has devastating consequences, and every patient should be treated and managed in emergency. The two different options available for the treatment are surgical clipping of the aneurysm or endovascular coiling. Also the post op management should be taken care for a better neurological outcome. **Methods:** It is a retrospective study from April 2009-Jan 2014 and prospective from Feb 2014-Jan 2015 of the patients who were symptomatic for aneurysmal SAH either ruptured/un-ruptured and underwent coiling or clipping for the aneurysm accordingly at KIMS hospital Secunderabad. A total of 244 patients over a period of 5 yrs were admitted for coiling or clipping who had either radiological or clinical evidence of aneurysm. Patient demography, Clinical grades, location of aneurysm, vasospasm and outcomes were analysed for both coiling and clipping. **Results:** A total of 191 patients underwent microsurgical clipping of which, 175 (92%) had anterior circulation aneurysm and 17 (18%) had posterior circulation aneurysm. Out of the operated 179 (94%) survived, and 12 (6%) expired. Similarly of the coiling patients 42 (70%) had anterior circulation aneurysm, and 18 (30%) had posterior circulation aneurysm. 1 patient in coiling had a rebleed, 4 of the patients from the coiling group eventually underwent clipping due to failed coiling. 56 (93%) survived and 4 (7%) died in coiling category. However the length of stay of the coiling patients was less i.e. 8 days when compared to clipping group where it was 13 days, but there was no significant outcome when compared to each other. **Conclusions:** In a developing country like India the cost of treatment of aneurysm and infrastructure required for endovascular coiling suite in most of the neuro center becomes a problem. In such a scenario our study supports that coiling and microsurgical clipping have equal outcomes and patients should be offered both type of treatments.

#### ISNACC-S-20

##### Outcome related to general anaesthesia versus regional anaesthesia for lower extremity surgery in patients with mild traumatic brain injury

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**Introduction:** Traumatic brain injury (TBI) is a major cause of morbidity and mortality. Secondary insults are known to worsen survival after TBI. The management of a brain injured patient following trauma for non-neurosurgical procedure, for example lower limb surgery, is a challenge. Regional anaesthesia (RA) has the advantage of continuous neuro-monitoring whereas there can be hypotension. General anaesthesia (GA) has the advantage of controlled ventilation, but multiple drugs can raise the ICP. There is no evidence to suggest that any particular anaesthesia technique or agent is optimal in this patient group.

**Methods:** This is a prospective randomised pilot trial (CTRI/2016/01/006554) among 40 patients with acute mild TBI, who presented for isolated lower extremity surgery, followed up till discharge. Under standard monitoring 20 patients were given GA with fentanyl, propofol, vecuronium, oxygen, air and desflurane. The other group of 20 patients RA received an epidural catheter and subarachnoid block with 0.5% bupivacaine and fentanyl. Intraoperative hemodynamics were recorded along with blood gases, amount of blood loss etc. **Results:** Outcome variables were found comparable in both groups, analysed as change in postoperative GCS (GA 14.00 ± 2.340; RA 14.75 ± 0.550; p 0.171), change in serum S100B levels (GA 137.5 ± 368.15 ng/L, RA 66.82 ± 277.34 ng/L; p 0.508). Intraoperative hemodynamics such as incidence of hypotension, hypoxia etc were also similar between the groups, however postoperative in-hospital days were less in the RA group (13.70 ± 3.114) vs GA group (18.10 ± 7.122; p 0.016) which also had higher incidence of wound infection and postoperative ventilator requirement. **Conclusion:** The results of our study indicates that both techniques appear similar in terms of neurological outcome.

#### ISNACC-S-21

##### Our experience with multi-drug resistant acinetobacter meningitis

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**Introduction:** *Acinetobacter baumannii* (AB) meningitis is not uncommon in neurosurgical ICU and its incidence has been rising. Recent trends show that an increasing number of infections are caused by strains that are resistant to multiple drugs including carbapenems. Effective therapy in such cases is not well established and such patients often have high mortality rates. The present study shares our experience with this notorious pathogen. **Case Summary:** We retrospectively reviewed cases of multi-drug-resistant (MDR) AB meningitis in Fortis hospital, Mohali from January 2014 to October 2016. We identified six cases in our retrospective review of records with equal distribution in both genders. Four patients had severe craniofacial trauma with base of skull base fractures while two had neurosurgical intervention. The mean duration of ICU stay and duration of therapy was 50 days and 24 days respectively. All the patients received intrathecal/ intraventricular and intravenous colistin in combination with carbapenems. One patient developed resistance to colistin while on treatment and required addition of minocycline and rifampicin to therapy. The same patient developed chemical meningitis secondary to the treatment. All six patients survived. One of them is severely disabled (modified Rankin score MRS = 5), while 3 patients had MRS 1 while 2 had a MRS of 2. **Conclusion:** Despite recent reports suggesting high mortality following AB meningitis, better outcomes were observed in our cohort of patients. Intraventricular/intrathecal colistin along with intravenous colistin can be an effective therapy for this dreaded disease.

#### ISNACC-S-22

#### Neurogenic stunned myocardium – A case report

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**Introduction:** Cardiovascular and pulmonary complications of subarachnoid bleed (SAH) accounts for significant morbidity and mortality. We present a case of neurogenic stunned myocardium following subarachnoid bleed managed at our hospital. **Case Summary:** A known diabetic and hypertensive lady presented with h/o sudden onset severe headache along with tachycardia, dyspnoea and hypoxia. She was drowsy, having diffuse SAH on CT scan and bilateral coarse crepitations. X ray showed s/o pulmonary edema, ST-T depression in anterolateral leads, positive qualitative Troponin T, raised cardiac enzymes and gross systolic dysfunction in Echo. She was managed

with ventilation, sedation, diuretics and inotropic support for hypotension. Surprisingly, she improved quiet rapidly over the next 24 hours with repeat Trop-T being negative and echo displaying complete recovery of cardiac performance. Cerebral angiography revealed ruptured aneurysm and treated by endovascular means. She continued to improve over the next few days and was discharged for rehabilitation being neurologically and hemodynamically stable. **Conclusion:** Neurogenic stunned myocardium is defined as myocardial injury and dysfunction occurring after acute brain injury as a result of imbalance of the autonomic nervous system. Spectrum of observed cardiac abnormalities includes ECG changes, arrhythmia and both systolic and diastolic dysfunction. Features key to the identification of neurogenic stunned myocardium are fully reversible post-ischemic dysfunction and that the dysfunction is not caused by a primary defect in myocardial perfusion. Our patient had reversible cardiac dysfunction which is indicative of neurogenic cause mimicking true myocardial injury although coronary angiogram needed to be done to strengthen our diagnosis.

#### ISNACC-S-23

#### Effect of magnesium sulfate nebulization in reducing the incidence and severity of post operative sore throat in patients undergoing surgery in prone position

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**Introduction:** Post operative Sore throat (POST), a common complaint after GA with tracheal intubation causes significant patient discomfort. Incidence is 21-65%. Many pharmacological and non-pharmacological methods have been studied for attenuation of POST. Changing patient's position from supine to prone can cause tube displacement and changes endotracheal cuff pressure affecting incidence of POST. Therefore, we planned to study prophylactic effect of Magnesium Sulfate nebulization in patients undergoing surgery in prone position. Hypothesis of the study was magnesium sulfate nebulization reduces incidence of POST in prone position surgery. **Methods:** Hospital based prospective interventional randomized double blind study. After getting institutional ethical clearance, 140 consenting patients belonging to American society of anaesthesiologists status 1-2, 20-60 years, either sex undergoing lumbar spine surgery in prone position were randomly allocated in two groups ( $n = 70$  each). Pre-operatively Group A and B were nebulized with 0.9% saline (5 ml) and magnesium sulfate (1 ml+ 4 ml saline) for 15 min respectively. GA was given and patients positioned prone 10 min after nebulization.