

the degree of functional recovery that may take place. The selection of airway management technique must be carefully considered. Clinical experiences in intubating patients with cervical spine injuries via the intubating laryngeal mask airway (ILMA™, Fastrach) encouraged us to undertake a prospective, randomised controlled study to compare upper cervical spine excursion during oral tracheal intubation using fibreoptic intubating scope with that during intubation via the ILMA™ (Fastrach). **Methodology:** Thirty-two patients aged between 18 and 65 years, belonging to American Society of Anesthesiologists status I-III physical status were included in the study. Patients who were morbidly obese or with oropharyngeal pathology or mouth opening <2 cm and those who refused to give the consent were excluded from the study. Patients were randomly assigned to one of two groups. Group fibreoptic bronchoscope: patients in whom trachea was intubated using fibreoptic intubating scope and group ILMA: patients in whom intubation was performed via the ILMA™ (Fastrach). Three lateral cervical spine X-rays were taken. In each group, during the different intubating procedures, excursion of the cervical spine was radiographically documented. **Results:** Cervical spine excursion during intubation with ILMA™ was more as compared to that during intubation with fibreoptic intubation at C1-C2. There was no neurological deterioration in either group post-intubation. Patients in both the group tolerated the procedure well. The incidence of sore throat was more in patients intubated with ILMA™. **Discussion/Conclusion:** In conclusion, findings of our study suggests that ILMA™ is not inferior to fibreoptic scope for awake intubation in patients with unstable cervical spine with respect to success rate of intubation, post-intubation neurological function, degree of cervical spine motion on fluoroscopy, haemodynamic changes and patient satisfaction.

#### ISNACC-S-13

**Effect of 0.45% saline and plasmalyte A used during intraoperative and post-operative period on serum osmolality in patients undergoing craniopharyngioma surgery**

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**Background:** Electrolyte imbalance and acute diabetes insipidus (DI) are the most common complications in patients undergoing craniopharyngioma surgery. Data are sparse regarding the choice of fluid in patients undergoing craniopharyngioma excision. We

compared the effects of iso-osmolar plasmalyte A and hypo-osmolar 0.45% saline infused perioperatively on perioperative serum osmolality, serum sodium level and incidence of DI. **Methodology:** A prospective randomised double-blind study was conducted in 28 patients undergoing transcranial excision of craniopharyngioma. The patients received either plasmalyte A or 0.45% normal saline intraoperatively and till 7<sup>th</sup> post-operative day. Serum and urine osmolality, serum and urine sodium, urine specific gravity, Glasgow coma scale and total dose of desmopressin required were measured in the perioperative period and for up to 7 days post-operatively. **Results:** Demographic data were comparable. A statistically significant difference was found between the two groups in serum osmolality at 2 h ( $P = 0.033$ ), 3 h ( $P = 0.009$ ) after the start of surgery, at the end of surgery ( $P = 0.013$ ) and on post-operative day 0 ( $P = 0.015$ ) with 0.45% saline group having serum osmolality <300 mosm/kg as compared to plasmalyte group. The urine osmolality at 2 h ( $P = 0.03$ ), at post-operative day 0 ( $P = 0.015$ ) and post-operative day 1 ( $P = 0.010$ ) was more than 300 mosm/kg in 0.45% saline group as compared to plasmalyte A group. Plasmalyte A group had hypernatremia ( $P = 0.015$ ) as compared to 0.45% saline group on post-operative day 1. **Discussion:** 0.45% saline has better effect than plasmalyte A on serum osmolality in patients undergoing transcranial resection of craniopharyngioma.

#### ISNACC-S-14

**Quest for the Holy Grail: Assessment of dynamic parameters of fluid responsiveness in patients with acute aneurysmal subarachnoid haemorrhage**

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**Introduction:** Delta down (DD) >5 mmHg, superior vena cava collapsibility index (SVCCI) >36% and aortic velocity time integral variability (VTI AoV) >20% are reliable predictors of fluid responsiveness in critically ill patients. The aim of this study was to assess the utility of DD, SVCCI, VTI AoV as predictors of fluid responsiveness in patients with acute subarachnoid haemorrhage (SAH) undergoing neurosurgery for clipping of intracranial aneurysm. **Methods:** After Institutional Ethics Committee approval, prospective pilot study was done on fifteen patients undergoing surgical management of intracranial aneurysm after informed consent. Post-recording baseline vitals, anaesthetic parameters, DD, SVC diameters, VTI AoV, stroke volume, cardiac output and cardiac index (CI), patients received fluid loading (FL) of 15 ml/kg of