laryngoscopy, most often, in lateral position (82.75%). Intraoperative haemodynamic disturbances and respiratory complications were observed in 31.0% and 17.2% of children, respectively. Intraoperative hypothermia was observed in 13.8% of these children. Postoperatively, six children underwent insertion of ventriculo-peritoneal shunt for hydrocephalus. The average stay in the intensive care unit (ICU) was 2.7 days and average hospital stay was 11.5 days. The condition at discharge was same as preoperative in 24 children (82.7%), deteriorated in 2 (6.9%) and three (10.3%) children died. **Conclusion:** Management of giant encephaloceles requires the knowledge of difficulties encountered during the perioperative period. This paediatric group requires specialized anesthetic care for dealing with difficult airway, unusual positioning, associated congenital anomalies, cardiorespiratory disturbances and even cardiac arrest, electrolyte abnormalities and hypothermia. For securing the airway, we suggest the practice of check laryngoscopy in lateral position following inhalational induction. Muscle relaxant should be administered after visualization of glottis. Though long-term outcome and mental development depends on various factors, avoiding perioperative insult is important.

Comparison of the effect of intravenous dexmedetomedine and lignocaine spray instilled into the endotracheal tube on extubation response in patients undergoing spine surgery: A randomized, double blind, placebo controlled study

Debojyoti Dutta, Mukesh Godara, Shobha Purohit, Poonam Kalra, S. P. Sharma

Department of Anaesthesiology, Sawai ManSingh Medical College, Jaipur, Rajasthan, India

Background: In spine surgery rapid emergence and extubation with haemodynamic stability is crucial for early neurological examination. Here we have studied the effect of alpha-2 agonist – dexmedetomedine (IV) and lignocaine spray instilled into the endotracheal tube at the end of procedure to attenuate the extubation responses. **Materials and Methods:** All total 45 patients undergoing spine surgery, were randomly allocated in three groups. After the return of spontaneous respiration, Group-D:- Dexmedetomedine 0.3m cg/kg IV, Group-L:- 10% Lignocaine spray 1.5 mg/kg through endotracheal route and Group-P:- Normal saline IV given over 60 seconds. Haemodynamic responses (SBP, DBP, MAP, HR, SPO2) were recorded before and after administration of drugs and also duration of emergence, extubation, quality of extubation and post-op sedation level were evaluated. **Result:** The increase in MAP and heart rate during extubation were significantly less in group –D than group-L and group-P, 2 min after administration of the respective drugs ($P < 0.05$). There was no significant differences in the grade of cough after extubation and post-op sedation level. **Conclusion:** Dexmedetomedine (0.3 mcg/kg) attenuates haemodynamic response better than lignocaine spray (1.5 mg/Kg) during emergence and extubation. It also provides smooth extubation and easy recovery without any post-operative sedative effect.

Comparision between suction above cuff endotracheal tube (SACETT) and standard endotracheal tube (SETT) on the incidence of the ventilator associated pneumonia in neuro ICU

Dheeraj Masapu, Sriganesh Kamath

National Institute of Mental Health and Neurosciences, Bangalore, Karnataka, India

Background: Ventilator associated pneumonia (VAP) is one of the commonest complication associated with endotracheal intubation. Occurrence of VAP has been associated with significant mortality and morbidity. Subglottic secretion drainage (SSD), using a specially designed ETT with a separate lumen above the cuff has shown to reduce the occurrence of VAP in some studies while others have not shown difference. The incidence of VAP in neurologically injured patients is higher and has significant impact on the neurological outcome. This study aimed to estimate the incidence of VAP with standard endotracheal tube and suction above cuff endotracheal tube (SACETT) in neurologically ill patients. **Materials and Methods:** Patients with neurological illnesses aged more than 18 years and requiring endotracheal intubation and/or mechanical ventilation for management in the NICU and anticipated to remain on ETT for more than 48 hours were included in this study. They were randomized to either standard ETT (SETT) or SACETT. All the VAP preventive measures were similar between the two groups except for the difference in type of tube. **Results:** The incidence of VAP as detected by new or increasing infiltrate on chest radiograph was 24% in SETT vs 28% in SACETT group, while microbiological VAP was higher in both the groups. There was no difference in the length of ICU or hospital stay or duration of ventilation. **Conclusions:** Use of SACETT over convention ETT did not result in reduction of VAP nor other outcome parameters.

Effect of tranexamic acid on blood loss and the quality of surgical field in meningioma resection surgery

Krishnan G. R., Panda N. B., Wig J., Singla N., Mukherjee KK., Aluhwahia J.

Post Graduate Institute of Medical Sciences, Rohtak, Chandigarh, India

Background: Resection of brain tumours has been associated with increased blood loss and blood transfusion. Achieving proper haemostasis forms one of the most important intraoperative goals in such surgeries. Tranexamic acid has been used to reduce blood loss in various settings, but its efficacy and use in neurosurgery is very limited. The purpose of this randomised, double-blinded, placebo-controlled, parallel trial was to evaluate the efficacy of Tranexamic acid on blood loss and quality of surgical field in meningioma resection surgeries. **Materials and Methods:** 30 patients, aged 18–65 years undergoing elective meningioma resection surgeries were included in the study. They received either Tranexamic acid or placebo at a loading dose of 25 mg/kg and infusion of 1 mg/kg/hr during surgery. The intraoperative blood loss was measured. The surgical field was assessed by the surgeon using 5-point Likert scale. **Results:** The patients who received Tranexamic acid had significantly less blood loss compared to the placebo group (616.42 ± 393.42 vs 1150.02 ± 416.1, $P = 0.02$), which accounted for 46.43% reduction in blood loss. It also reduces the intraoperative blood transfusion requirement (0 vs 6, $P = 0.0016$). The quality of the surgical field was significantly better in the Tranexamic acid group with a median score 4 compared to 2 in placebo group ($P < 0.001$). The blood collected in closed suction drain 24 hours post surgery was less in the Tranexamic acid group compared to placebo group (84.7 + 50.4 vs 127.6 + 62.2, $P = 0.047$). **Conclusion:** Tranexamic acid reduces perioperative blood loss and transfusion requirement with improved surgical field in patients undergoing meningioma resection surgeries.

Post-operative cerebral vasospasm prophalaxis using hypertensive therapy alone in cerebral aneurysm clipping: Our experience at KIMS

Harshal Dholke, Avinash Manekar[1], Narsimha Rao[2], Manas Panigrahi[3]

Senior Registrar Neuroanaesthesia, [1]Senior Registrar Anaesthesia, [2]Senior Consultant Neuroanaesthesia, [3]Senior Consultant Neurosurgery, Krishna Institute of Medical Sciences, Secunderabad, Hyderabad, India

Background: To discuss the institutional experience in the management of post operative vasospasm in cerebral aneurysms using hypertensive therapy. **Materials and Methods:** It is a retrospective descriptive study done in patients with cerebral aneurysms who were managed by surgery at KIMS hospital between Jan 2009 to Oct 2014. Totally 200 patients are included in this study. **Results:** As per the age distribution there were 39 patients with age < 40 yrs, 52 aged 40–49 yrs, 58 aged 50–59 yrs, 39 aged 60–69 yrs and 12 aged > 70 yrs. As per WFNS grading criteria 106 patients were Gr I, 52 were Gr II, 20 were Gr III, 17 were Gr IV and 5 were Gr V. 178 patient had ruptured aneurysm and 22 patient were with un-ruptured aneurysm. Of the 200 patients 61 patient developed post op vasospasm requiring treatment with Papaverine through intra-operatively placed reservoir. Of this 61 patients 10 patients had vasospasm during 1–2 days, 33 during 3–4 days, 13 during 5–10 days, 2 during 11–15 days 1 during 15–20 days and 2 patients developed vasospasm after 20 days post ictus respectively. **Conclusions:** Using only hypertensive therapy as prophylaxis for post op vasospasm 61 patients of the total 200 developed vasospasm, and 48 patients had vasospasm during 3rd to 15th day post ictus. To conclude the incidence of cerebral aneurysm is more common in females after 50 years. Most are ruptured status with WFNS Gr I. Prophylactic administration of Hypertensive therapy alone can decrease the incidence of post op vasospasm 30.5% in our study when compared to conventional use of triple H therapy where the incidence in various trials is in-conclusive.

Attenuating emergence response: Fentanyl or dexmedetomidine, which is better?

Murthy H. S., Liyakath Ali[1], Manjunath D. R., Jalaja K. R., Parameshwara G.

Consultant, [1]Lecturer, Gulbarga Institute of Medical Sciences Hospital, Gulbarga, Karnataka, India, Manipal Hospital Bangalore, Bangalore, Karnataka, India

Background: Fentanylis often used to attenuate the emergence haemo dynamic response following general anaesthesia which when untreated could cause post-craniotomy intracranial haematoma. We compared dexmedetomidine with fentanyl and placebo, for attenuating haemo dynamic response during emergence and extubation. **Materials and Methods:** One hundred fifty AS A grade I and II normotensive patients, aged 18–55 years undergoing elective surgeries under general anaesthesia were randomized into 3 groups. Ten minutes prior to extubation, patients received intravenous bolus infusion of saline 0.9%, fentanyl 1 μg/kg and dexmedetomidine 1 μg/kg respectively over 10 minutes period. Heart rate (HR), blood pressures, extubation quality (5-point scale), sedation and recovery scores were recorded at regular intervals. Rescue drugs used were noted. **Results:** At extubation, HR increased by 49 ± 19% with saline compared to 27 ± 14% with fentanyl and 15 ± 15% with dexmedetomidine ($P < 0.001$). Systolic blood pressure increased by 43 ± 13% with saline compared to 23 ± 13% with fentanyl and 16 ± 14% with dexmedetomidine ($P < 0.001$). Hypertensive response (>30% increase from baseline) was seen in 86%, 18% and 6%of patients ($P < 0.001$) for a duration of15 ± 14 minutes, 4 ± 2 minutes and 6 ± 5 minutes with saline, fentanyl and dexmedetomidine