Abstract

IPVV with 50% Air: Oxygen. Continuous radial arterial pressure, CVP and EtCO₂ was monitored throughout surgery. During facial and auditory nerve testing, muscle relaxant was discontinued and TOF monitoring was used. Any intraoperative (VAE, haemodynamic instability) and postoperative (pneumoencephalos, macroglossia, neurodeficits) complications were noted. Results: In our study, 50% of patients had a drop in BP 10-20 mmHg during positioning and 15% had bradycardia during surgical retraction. Incidence of VAE was 7% and associated hypotension was seen in 2 patients. All patients developed postoperative pneumoencephalo but only 1 patient presented with temporary blindness. 1 patient had macroglossia and had to be reintubated. There was 1 case of temporary quadriplegia and 1 foot drop. There was no mortality. Conclusion: Despite potential complications, with appropriate patient selection and intraoperative monitoring patients will benefit from using sitting position for posterior fossa surgery.

The incidence of coagulopathy and its effect on outcome in patients with traumatic brain injury (TBI)

Sonia Bansal, Rohini M. Surve, Bhadri V. Narayan¹, B. Madhusudhana Rao², S. Sampath¹

Assistant Professor, and ¹Professor, National Institute of Mental Health and Neurosciences, Bengaluru, Karnataka, ²Resident DM Neuroanaesthesia, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandum, Kerala, India

Background: Coagulopathy following isolated traumatic brain injury (iTBI) is well known and studies have found an association between coagulopathy and unfavourable outcome. We conducted this study to determine the incidence and the effect of coagulopathy (both early and late) on postoperative outcome. Materials and Methods: In this prospective observational study the following data were collected: age, sex, mode of injury, CT diagnosis, post-resuscitation Glasgow Coma Scale (GCS), preoperative and post operative platelet count, liver function tests, intraoperative blood loss and transfusion, fluids infused, and repeat surgery for haematomas. Coagulocheck XS was used to obtain prothrombin time (PT) and International Normalized Ratio (INR) within 1st 24 hours and repeated at 48-72 hours. Coagulopathy was defined as INR ≥ 1.3 and thrombocytopenia as platelet count ≤ 1 lakh. Outcome measures used were length of hospital stay, GCS at discharge and mortality. Results: In the study population of 166 patients, mean age was 36 ± 13 years and average preoperative GCS was 8.8 ± 3.6. The incidence of coagulopathy increased from 42.8% to 55.6% and thrombocytopenia from 3.5% to 14.7% at 72 hours. Patients with coagulopathy had lower preoperative GCS (8.6 ± 3.4 vs 9 ± 3.6, P = 0.02), had greater intraoperative blood loss and received more crystalloids and colloids. However, there was no difference in the incidence of postoperative haematomas, length of stay, GCS at discharge or mortality. Conclusion: The incidence of early coagulopathy is high, increases at the end of 48-72 hours and is associated with increased intraoperative blood loss and fluid requirements. However, we could not demonstrate increased mortality or poor outcome in patients with deranged coagulation.

Effect of dexmedetomidine for ICU sedation in head injury patients

Sujoy Banik, Ashish Bindra, Varun Jain, Keshav Goyal, Niraj Kumar, Girija P. Rath

Department of Neuroanaesthesiology, All India Institute of Medical Sciences, New Delhi, India

Introduction: Although neuro-intensive patients share many goals with general ICU patients, some indications are unique to the NICU population, such as maintaining adequate cerebral perfusion pressure (CPP), while controlling intracranial pressure (ICP) and mean arterial pressure (MAP). Materials and Methods: We compared the effect of 0.2-0.7 µg/kg/hr dexmedetomidine infusion to a standard sedative infusion of fentanyl 0.2-1 µg/kg/hr and midozalam 0.02-0.07 mg/kg/hr in 11 consecutive patients of Traumatic Brain Injury (TBI) admitted to the neurosurgical intensive care unit (NICU) in crossover alternation for the first 48 hours after admission, titrating sedation to the Richmond Agitation-Sedation Scale (RASS). Results: Patient demographics were well matched between the two groups. Hemodynamics (HR, MAP) and intracranial pressure (ICP) along with cerebral perfusion pressure (CPP) were well maintained within (P = 0.472, 0.219, 0.328, and 0.165) and between both the groups (P = 0.096, 0.432, 0.478, 0.175 respectively) and the differences were not statistically significant [Figures 2-4]. Patients in Group D had similar RASS scores to those of Group C (P = 0.894) [Figure 5]. GCS was positively correlated with RASS in Group D (P = 0.467, P = 0.021) and Group C (P = 0.654, P = 0.001). Amount and number of rescue boluses of sedation with midazolam were similar in both the groups (n = 3, P = 0.463), nor any adverse effects seen in either group. Conclusion: Dexmedetomidine is a safe alternative to conventional fentanyl and midazolam sedative infusion for TBI patients admitted to Neurosurgical Intensive Care Unit, maintaining both cardiovascular (HR, MAP) as well as cerebral (ICP, CPP) dynamics, paving the way for future exploration of dexmedetomidine for sedation for neurosurgical ICU patients.

Attenuation of extubation responses: Comparison of prior treatment with verapamil and dexmedetomidine

Tuhin Mistry, Jaya Sharma, Shobha Purohit¹, Gunjan Arora²

¹Junior Resident, ²Senior Professor, ³Senior Resident, Sawai ManSingh Medical College and Attached group of Hospitals, Jaipur, Rajasthan, India