

case of intraoperative bradycardia and brief asystole, which was in fact an ictal bradycardia, visualized in the intraoperative electroencephalogram (ECoG) recordings. By convention, anesthesiologists consider seizures as an etiology in intraoperative tachycardia scenarios. It is important to identify ictal bradycardia as a potential harbinger of lethal rhythms, such as asystole; this may lead to sudden unexpected death in epilepsy patients (SUDEP) presenting for surgery.²

Methodology/Description: A 30-year-old male patient diagnosed with mesial temporal sclerosis of right temporal lobe presenting for right anterior temporal lobectomy and hippocampectomy had brief period of bradycardia, asystole lasting less than 30 seconds, revived with CPR. Concomitantly the electrophysiologist reported ictal activity on the ECoG. Immediate intravenous administration of inj. thiopentone 100 mg resulted in cessation of the electrographic seizures with simultaneous termination of bradycardia with heart rate settling back to the baseline.

Conclusion: The search of literature proved that there are no reported cases of intraoperative ictal bradycardia being suspected as a cause for intraoperative bradycardia. Thus, authors intend to create awareness about this rare phenomenon, which remains undiagnosed and may lead to life-threatening events in intraoperative period.

Keywords: intraoperative, seizures, bradycardia

References

1. Marshall DW, Westmoreland BF, Sharbrough FW. Ictal tachycardia during temporal lobe seizures. *Mayo Clin Proc* 1983;58(7):443-446
2. Oppenheimer SM, Cechetto DF, Hachinski VC. Cerebrogenic cardiac arrhythmias. Cerebral electrocardiographic influences and their role in sudden death. *Arch Neurol* 1990; 47(5):513-519

A019 Utility and Predictive Value of CHIDA Score in Pediatric Traumatic Brain Injury: A Pilot Study

Ruchi Jain,¹ Hemangi Karnik,¹ Dipti Kotwani¹

¹Department of Anaesthesiology, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, Maharashtra, India

Introduction: The appropriate initial care of children with complicated mild traumatic brain injury (mTBI, Glasgow Coma Scale [GCS] scores of 13 to 15 and intracranial injury on CT) remains unclear. ICU observation detects early neurological worsening but it increases costs. The Children's Intracranial Injury Decision Aid (CHIDA) score identifies which children can be safely observed in ward. The goal of this study is to assess the utility of CHIDA score to predict the need for ICU admission in children with complicated mTBI.

Methodology/Description: This prospective observational study, following ethics committee approval, included children < 18 years of age admitted to trauma ICU from July to September 2017 with mTBI. Patients with trivial trauma, penetrating TBI, GCS < 13 were excluded. CHIDA score was calculated. The primary study outcome was the composite

of neurosurgical outcome, intubation for > 24 hours for head trauma or death. Sensitivity, specificity, predictive values, and likelihood ratios were calculated.

Results: Twenty-eight out of 50 patients had CHIDA score > 0 while 25 patients scored > 2. Of these, six patients (12%) experienced the primary outcome including one death. Using a cutoff of score > 0 to admit to ICU had a sensitivity of 100% and a negative predictive value of 100%. Using a cutoff of score > 2 had a sensitivity of 83.33% and a negative predictive value of 96%. Using these cutoffs, ICU admission would have been avoided in 44 and 50% patients, respectively.

Conclusion: CHIDA score seems to be a useful tool but needs to be validated in developing countries in more patients.

Keywords: traumatic brain injury, Pediatric, CHIDA

References

1. Kuppermann N, Holmes JF, Dayan PS, et al; Pediatric Emergency Care Applied Research Network (PECARN). Identification of children at very low risk of clinically-important brain injuries after head trauma: a prospective cohort study. *Lancet* 2009;374(9696):1160-1170
2. Greenberg JK, Yan Y, Carpenter CR, et al. Development and internal validation of a clinical risk score for treating children with mild head trauma and intracranial injury. *JAMA Pediatr* 2017;171(4):342-349

A020 Venous Air Embolism in Brain Tumor Surgery Presentation under Anesthesia and Its Association with Postoperative Venous Infarction of the Brain

Amlan Swain,¹ Seelora Sahu,¹ Manish Pai¹

¹Department of Anaesthesia and Critical Care, Tata Main Hospital, Jamshedpur, Jharkhand, India

Introduction: Venous air embolism (VAE) is a relatively common occurrence in neurosurgical procedures (16-86%), although the proportion of clinically significant VAE is lesser. A higher incidence is seen with sitting position and posterior fossa surgery. However, it is less commonly associated with the occurrence of venous infarct. We hereby present a case of VAE during excision of meningioma and the subsequent development of venous infarct necessitating decompressive hemicraniectomy.

Methodology/Description: Preoperative preparation of the patient was uneventful except for a deranged sugar profile, which required administration of insulin. The intraoperative course was marked by an episode of VAE (sudden severe hypotension, sudden drop in end-tidal carbon dioxide, drop in the saturation) when the neurosurgeons were dissecting the tumor. Such a period of hypotension and hypoxia persisted for barely 3 to 4 minutes and necessitated intensive resuscitation measures. Rest of the surgical and anesthesia course was uneventful, and the patient was shifted to the critical care unit (CCU) for elective ventilation and was subsequently extubated the following day. However, the patient subsequently developed a right parieto-occipital venous infarct requiring a decompressive craniectomy after failure of medical measures to contain the dysfunctional intracranial