A0024 Effect of Combination of Ketamine and Propofol (Ketofol) on Cerebral Oxygenation Using $SjVO_2$ as Parameter in Neurosurgical Patients: A Randomized Double-Blind Control Trial

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Background: The effects of ketofol on several parameters such as hemodynamics and requirement of opioids/propofol have been published. But data on effects of ketofol on cerebral oxygenation are inadequate. This study aims to compare the effects of ketofol (ketamine:propofol = 1:5) with propofol on cerebral oxygenation (jugular venous oxygen saturation [$SjVO_2$]), in patients undergoing surgical clipping of intracranial aneurysm.

Materials and Methods: Forty WFNS I and II patients were randomized into ketofol (n = 20) and propofol (n =20) groups. Post-induction $SjVO_2$ catheter was inserted, and anesthesia was maintained with propofol/fentanyl in propofol group and ketofol/fentanyl in the ketofol group. $SjVO_2$ was obtained at baseline, 1 hour and 2 hours intraoperatively and at 6 hours after the surgery. Also, intraoperative brain relaxation, fentanyl requirement, and hemodynamics were noted.

Results: Higher $SjVO_2$ values were observed in ketofol group compared with propofol at 1 and 2 hours after starting the drug and at 6 hours after surgery ($p < 0.05$). In propofol group, a significant fall in $SjVO_2$ was recorded at 2 hours (during temporary clipping) after the starting of drug as compared with the baseline ($p = 0.001$). All recordings of $SjVO_2$ in both the groups were within normal limits. Requirement of fentanyl in ketofol group was less as compared with propofol group ($p = 0.022$). More than 20% fall in mean arterial pressure (MAP) compared with baseline MAP was noted in 75% of patients in propofol group and 15% of patients in ketofol group ($p = 0.002$). In propofol group, 55% patients required rescue drug phenylephrine to treat hypotension, whereas only 15% patients required it in ketofol group ($p = 0.02$). Brain relaxation score was comparable in both the study groups ($p = 0.887$).

Conclusions: Maintenance of anesthesia with ketofol provides better cerebral oxygenation and hemodynamic stability compared with propofol in patients undergoing clipping of cerebral aneurysm after SAH.

A0025 An Unusual Case Presentation as Nonconvulsive Status Epilepticus: Autoimmune Encephalitis

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Background: Nonconvulsive status epilepticus (NCSE) accounts for 25% of all cases of status epilepticus. Refractory status epilepticus (RSE) is defined as continued clinical/electrographic seizures after adequate dosing of initial benzodiazepine, followed by second-line antiepileptic drug and is associated with worse prognosis than nonrefractory status epilepticus. When RSE occurs in an individual without any history of epilepsy and no immediate underlying etiology is found, it is referred to as new-onset refractory status epilepticus (NORSE). This clinical scenario may be notoriously difficult to treat and does not respond to initial medications. In cases of NORSE where an etiology is found, antibody-mediated disorders are the most common cause. Autoimmune encephalitis refers to a diverse group of neuropsychiatric disorders. It can have a variable pattern of clinical presentation with an array of symptoms many of which make diagnosis difficult due to similarities in clinical, imaging, and laboratory findings with respect to other forms of autoimmune or infectious encephalitis.

Case Description: Our case report highlights how a patient with acute-onset history, showing generalized periodic epileptiform discharges on electroencephalogram (EEG) but with no prior history of seizures was eventually diagnosed as autoimmune encephalitis based on clinical findings, cerebrospinal fluid (CSF) reports, and EEG analysis.

Conclusions: As a presentation of autoimmune encephalitis, nonconvulsive status epilepticus requires high level of suspicion. Early EEGs with prompt and aggressive treatment can improve patient outcomes drastically.

A0026 Diagnosis of Nonalcoholic Wernicke Encephalopathy in an Intensive Care Unit Patient: A Diagnostic Dilemma

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Background: Wernicke encephalopathy (WE) is a known complication of thiamine deficiency, normally seen in patients having excessive alcohol intake. It is characterized by a triad of symptoms of confusion, ophthalmoplegia, and ataxia. Symptomatic thiamine deficiency in nonalcoholics is less known (0.1%) and is often underdiagnosed. Overall, if WE is diagnosed at an early stage and treated, complications can be reversed. We present the case of a patient operated for perforation peritonitis who was subsequently diagnosed and managed for nonalcoholic WE.

Case Description: A 22-year-old male patient admitted to surgical emergency with complain of pain abdomen and vomiting since 2 days survived after an event of cardiac arrest. Patient was operated for perforation peritonitis and shifted to intensive care unit (ICU). On 35th day of ICU stay, he became disoriented and developed nystagmus. A provisional diagnosis of neurological sequelae of hypoxic ischemic brain injury was made, and MRI was planned. MRI showed features suggestive of WE. Intravenous thiamine was started. The patient improved, became conscious, responsive, and nystagmus disappeared. Gradually, the patient was weaned to room air and discharged home.

Conclusions: Wernicke encephalopathy should be taken into consideration in surgical patients admitted in