hand for 2.5 years, dysphagia for solids and liquids since 3 weeks. On examination, she had right fourth, sixth and eighth nerve palsy, with right lower motor neuron facial palsy (seventh) and right side paresis of SCM (eleventh). On investigation, she was found to have a well-defined enhancing lesion about 1.8 cm × 1.3 cm involving right side of medulla extending to pons. She was posted for stereotactic biopsy under general anaesthesia. The procedure was uneventful. The patient was reversed and extubated. Post-operatively she was unable to swallow secretions and cough adequately resulting in aspiration and laryngospasm/bronchospasm, for which she was reintubated and ventilated. She was extubated on the 6th day and discharged after 4 days. Stereotactic biopsy is a relatively safe procedure but studies have shown complications such as post-operative development of new cranial nerve palsies and worsening of existing deficits which could have occurred in our case. At discharge, although the existent cranial nerve palsies persisted, she was able to swallow and expel secretions as she did before surgery. Thus, it is imperative that we need to be updated about the post-operative complications of certain recently developed procedures and plan accordingly.

ISNACC-C-08

Perioperative management of uncorrected D-transposition of great arteries with brain abscess: A case report

Saurabh Suman, L. D. Mishra, Nitu, Neerajkumar

Department of Anaesthesiology, S.S. Hospital, I.M.S., BHU, Varanasi, Uttar Pradesh, India

Transposition of great arteries (D-TGA) is the most common cyanotic congenital heart defect in neonate where aorta arises from right ventricle and pulmonary artery from left ventricle. Seizure, sudden cardiac arrest, haemodynamic instability, cyanotic spells, coagulation defects, electrolyte and acid-base imbalance are major complications in such patients. Mortality rate remains very high in these patients. Patients with cyanotic heart disease are prone to develop frequent brain abscess. Here, we want to report management of a patient having cyanotic heart disease (uncorrected D-TGA) presented with multiple episodes of seizures, high-grade fever and severe respiratory distress. Initially, we managed the patient in Intensive Care Unit (ICU) with ventilatory support and antibiotic coverage. After stabilisation, computed tomography brain was planned which revealed ring enhancing lesion in left temporal lobe causing mild mass effect and moderate surrounding oedema with abnormal leptomeningeal enhancement (S/O: Abscess? Tubercular?). Hence, we

took neurosurgical opinion then transferred the patient to operation theatre and planned for drainage of abscess. There was no abnormal intraoperative event. After operation, patient was shifted to ICU and gradually weaned from ventilator and extubation was done. Patient was shifted to ward and was advised for cardiosurgical opinion regarding cyanotic heart disease.

ISNACC-C-09

Role of anaesthesiologist in neuroendovascular intervention

Deepa Chaturvedi

Max Super Specialty Hospital, New Delhi, India

In recent years, the endovascular treatment of disease of intracranial and spinal vessels has become widely popular. Mostly these procedures are done under general anaesthesia. Hence, choosing an appropriate anaesthesia regimen and careful pre-intervention preparation are most important. The anaesthesiologist can modify and influence the post-intervention outcome. The working environment in digital subtraction angiography (DSA) lab. is quite different from regular OT. Long breathing circuit, long intravenous line and long infusion lines are required for smooth movement of DSA machine. Low ambient temperature is maintained as pre-request for DSA machine. Hence, it is vital to maintain body temperature of the patient by applying heating unit. In DSA lab. All the facilities should be there to address the routine as well as emergency procedures. Short-acting narcotics and muscle relaxants should be used to facilitate the intervention if required for neuroradiologist and anaesthesiologist. After the procedure, the patient should be monitored at least 24–48 h. Pre-interventional and post-interventional complications such as thermo-embolism or haemorrhage must be managed aggressively. The anaesthesiologist plays crucial role to improve the post-intervention outcome. Therefore, good communication, close interaction and cooperation between the anaesthesiologist and neuroradiologist is vital for successful management of these patients.

ISNACC-C-10

An unusual cause of loss of brainstem reflexes-barbiturate infusion for status epilepticus

Saurabh Bhargava, Anu Yadav, Sanjeev Attry¹

Departments of Neuroanesthesia and Intensive Care and

¹Neurosurgery, NIMS Medical College, Jaipur, Rajasthan, India

Background: High dosage barbiturate infusion is commonly used as last resort in patients with

refractory status epilepticus or uncontrolled intracranial hypertension. It is major disadvantage being neurological suppression including loss of brainstem reflexes mimicking brain death posing diagnostic dilemma during neurological assessment of the patient.

Case Summary: A 17-year-old poorly built male, an old operated case of head injury, was admitted to the NIMS Hospital. He suffered cardiac arrest from which he was successfully revived. Post-arrest, he was ventilated. Some hours later, he developed generalised tonic-clonic seizures. He was given injection midazolam 4 mg (in graduated doses) followed by injection phenytoin 1000 mg. He was already on inj levetiracetam 500 mg BD. Injection midazolam infusion was started at 2 mg/h and increased to 5 mg/h without success. Injection valproate bolus 1 g intravenous (IV) was administered without success. Injection thiopentone 150 mg IV bolus followed by 25 mg twice aborted the seizures. Patient was later started on thiopentone infusion at 50 mg/h which successfully stopped the seizures for about 2–3 h. Midazolam infusion was stopped. Later, he developed focal facial seizures for which infusion was progressively increased to 150 mg/h which achieved total seizure control, confirmed by Burst suppression on electroencephalography (EEG). He was continued on the same dose for 2 days. With no evidence of seizures on a repeat EEG, the patient was slowly weaned off thiopentone over 24 h. No seizures were reported during or after this period. On the 2nd day of thiopentone infusion, oculocephalic reflexes were found to be absent. Other reflexes including pupillary reaction to light were present. Oculocephalic reflex became positive on the next day after stopping the infusion.

Conclusions: (1) Oculocephalic reflexes were as a result of use of thiopentone infusion. (2) The loss of brainstem reflex in our case was at a lower dose than reported in earlier studies. It can be a confounding factor during the assessment of neurological status of patients with brain trauma or post-cardiac arrest and may mimic brain death when all the brainstem reflexes including pupillary reaction to light are lost.

ISNACC-C-11

Spontaneous sinus arrest following intravenous phenytoin for post-operative seizure prophylaxis

Harshal Dholke

Department of Anaesthesia and Critical Care, KIMS Hospital, Secunderabad, Telangana, India

Background: In resistant epilepsy invasive techniques remains important because of poorly defined or close proximity of the epileptogenic zone to eloquent cortex. Grids are inserted by open craniotomy. In the second surgery, the electrode grids and seizure focus

is removed. Anti-epileptic prophylaxis is instituted for the management of patients with brain surgeries, hence prophylactic anticonvulsants are given for suppression of post-operative seizures. Phenytoin when compared to placebo has been reported to be significantly more effective in preventing post-traumatic seizures during the 1st week.

Case Summary: A 4-year-old child with history of refractory seizures on antiepileptics, underwent craniotomy with contact grid placement with localisation of ictal focus. The patient received phenytoin as surgical prophylaxis during second sequential surgery, after which he went into spontaneous sinus arrest following the recommended dose. He was successfully reverted to sinus rhythm after resuscitation as per ACLS guidelines. Following surgery, there was 90% reduction of abnormal electroencephalography activity. Post-operatively phenytoin was omitted from the drug list. Next 5 days, he was seizure free; after 2 days of ventilator support, he was extubated following which he was seizure free and was later.

Conclusions: It is common to have seizures in the early post-operative period, with no implications in the long run. The brain trauma foundation suggests prophylaxis, including a treatment option of giving phenytoin or carbamazepine to prevent seizures in the 1st week. With the use of phenytoin there is always an unpredictable cardiac risk. Side effects associated with parenteral phenytoin are caused by its high pH level and the propylene glycol or ethanol content used to increase solubility. The vehicle for the most widely used parenteral formulation of phenytoin is 40% propylene glycol and 10% ethanol, adjusted to a pH of 12 with sodium hydroxide. This glycol solvent is linked to seizures, arrhythmia, asystole, hepatic and renal damage. Other toxic include hyper osmolality, haemolysis and lactate-associated metabolic acidosis. It is recommended to have continuous monitoring of blood pressure and pulse in patients who are started on phenytoin. Also, for risk patients, a baseline echocardiography is also suggested. The Naranjo scale which is an adverse drug reaction probability scale, utilising a set of questionnaires, to assess drug-related adverse events this can be implemented.

ISNACC-C-12

Anaesthetic management of emergency craniotomy in a patient with left ventricular assist device

Saraswathy Shekar

Department of Anesthesiology, University of Massachusetts Medical School, Worcester, MA, USA

Introduction: Left ventricular assist device therapy is an established treatment modality for patients with advanced heart failure. Short-term use of these devices