References

1. Sheshadri V, Raghavendra S, Chandramouli BA. Perioperative anaesthetic concerns during paediatric epilepsy surgeries: a retrospective chart review. J Neuroanaesth Crit Care 2016;3:110–114
2. Bithal PK. Anaesthetic considerations for evoked potentials monitoring. J Neuroanaesth Crit Care 2014;1:2–12

A034 Effect of Comorbidities on the Outcome of Patients with Aneurysmal SAH: A Prospective Observational Study

Sunaakshi Puri,[1] Hemant Bhagat,[1] Kiran Jangra[1]

[1]*Department of Anesthesia, PGIMER, Chandigarh, India*

Introduction: Subarachnoid hemorrhage (SAH) carries a high mortality of 30 to 40%. Among survivors, 40 to 50% suffer disability and cognitive decline. Comorbidities can have a contribution in the disease process. With this background, we hypothesize that comorbidities in a patient with aneurysmal SAH can influence the course of disease and thereby the neurological outcome.

Methodology/Description: This prospective observational study was commenced after ethics committee clearance and written informed consent. We enrolled 89 (59 females and 30 males) consecutive patients of aneurysmal SAH, scheduled for clipping/coiling from July 2016 to October 2017. Patients' comorbidities were recorded and outcome followed in postoperative period using MRS at discharge and MRS and GOS at 1 month after discharge. Analysis was done using chi square test.

Results: In patients undergoing clipping, smoking was associated with worse outcome (0.01). Smoking and alcohol intake was associated with increased incidence of vasospasm, infarct, and rebleed ([0.02 and 0.04], [0.001 and 0.003], [0.02 and 0.04], respectively). In patients undergoing coiling, CAD was associated with worse outcome (0.02), increased incidence of rebleed (0.007), and hydrocephalus (0.03). Smoking, alcohol intake, and DM were associated with increased incidence of vasospasm (0.014, 0.04, and 0.04, respectively). Smoking was also associated with increased incidence of rebleed (0.005). Hypertension, thyroid dysfunction, TB, and joint disease were not associated with worse outcome or increased incidence of complications.

Conclusion: Various comorbidities, including DM, CAD, smoking, and alcohol intake, were associated with increased risk of perioperative complications in patients after SAH. Other comorbidities, such as hypertension, thyroid dysfunction, TB, and joint disease, neither affect outcome nor increase risk of complications.

Keywords: SAH, CAD, DM, MRS

References

1. Rosengart AJ, Schultheiss KE, Tolentino J, Macdonald RL. Prognostic factors for outcome in patients with aneurysmal subarachnoid hemorrhage. Stroke 2007;38(8):2315–2321

A035 Anesthetic Approach to a Patient with Intracranial Aneurysm, Severe Ischemic Heart Disease, and Poor Left Ventricular Function

Shanthi Aila,[1] Rajashree Agaskar,[1] M. R. Rajani[1]

[1]*Department of Anaesthesiology, Jaslok Hospital and Research Centre, Mumbai, Maharashtra, India*

Introduction: The incidence of a cerebral aneurysm in general population is 0.5 to 5%. The annual incidence of rupture of an asymptomatic aneurysm has been estimated at 7 to 10 cases per 1 lakh population. Rupture results in subarachnoid hemorrhage causing death or permanent disability in approximately 50% of patients. Prevalence of ischemic heart disease (IHD) is 7.4 to 14%. Together, IHD and stroke are responsible for more than one-fifth (21.1%) of all deaths and one-tenth of the years of life lost in India. Myocardial infarction within 6 months of noncardiac surgery was found to be an independent risk factor for perioperative stroke. A condition with intracranial aneurysm and IHD is a situation of dilemma to decide which one to be treated first; however, existing literature is limited in such cases. We are presenting this case report to discuss the approach and anesthetic considerations for such a patient.

Methodology/Description: A 62-year-old male patient, known case of hypertension, diabetes mellitus, and past history of cerebrovascular accident presented with left arm pain, episode of transient ischemic attack, pedal edema, and exertional dyspnea. On neurological and cardiac evaluation, he was diagnosed with unruptured left middle cerebral artery aneurysm measuring 4 × 4 mm with a neck width of 3 mm and triple vessel disease with severe left ventricular dysfunction with ejection fraction of 20%. Considering the risk associated with general anesthesia for aneurysm coiling versus risk of rupture, we decided to go ahead with off-pump coronary artery bypass grafting (CABG) first to prevent cardiopulmonary bypass-related coagulation abnormalities. Aneurysm is managed conservatively in view of size and location. Management of this case is a challenge for anesthesiologists to keep a balance of hemodynamics to prevent the rupture of intracranial aneurysm on one side and maintaining coronary perfusion pressures to prevent perioperative myocardial infarction on the other side.

Conclusion: Off-pump coronary artery bypass grafting is a good option for preoperative optimization in a patient scheduled for intracranial aneurysm surgery with poor left ventricular dysfunction.

Keywords: intracranial aneurysm, ischemic heart disease, off-pump coronary artery bypass grafting

References

1. Mayer RC, Krohn JS, McLaughlin DF. Coronary artery bypass grafting in a patient with multiple intracranial aneurysms and recent subarachnoid hemorrhage. Anesth Analg 1993; 76(4):887–891
2. Bose B, McNicholas KW. Clipping of cerebral aneurysm under hypothermic cardiac arrest and simultaneous coronary artery

bypass grafting: case report. J Neurol Neurosurg Psychiatry 2002;72(3):394–395

A036 Anesthesia Challenges in Pregnant Lady with Traumatic Brain Injury: Report of Two Cases

Veena Ganeriwal,[1] Roshani Chetwani[1]

[1]*Department of Anesthesiology and Critical care, Grant Government Medical College and Sir J. J. Groups of Hospital, Mumbai, Maharashtra, India*

Introduction: Trauma is the commonest nonobstetrical cause of death in females, complicating approximately 6 to 7% of all pregnancies. The common etiology for trauma in pregnancy is motor vehicle accidents, falls, violent assaults, and burn injuries. Management of these patients poses a lot of challenges to anesthesiologists, neurosurgeons, and obstetricians as two lives are involved.

Methodology/Description: We describe successful anesthesia management and maternal and fetal outcome of two patients admitted with neurotrauma, sustained after fall from Mumbai local train. The first was a 26-year-old lady, 36 weeks pregnant with acute right temporoparietal extradural hematoma diagnosed on computed tomography (CT) scan with Glasgow Coma Scale (GCS) 15/15, operated under general anesthesia. She was extubated postoperatively and discharged after 5 days. After a week of discharge, she delivered a baby boy without any abnormality. Another pregnant female, 29 years old, came with head injury. CT scan showed depressed right parietal skull bone fracture with brain contusion. She was admitted with GCS 12/15 and 18 weeks gestation on USG with viable fetus and underwent decompression craniotomy under general anesthesia. Postoperatively, she required ventilatory support for prolong time and delivered 1.4 kg premature baby at 32 weeks of gestation. She showed no neurological improvement and succumbed to death after 6 months of hospital stay. Our aim to report these cases is to assess, how timely multifaceted intervention in pregnant lady with post-traumatic brain injury can affect the outcome.

Conclusion: The management of trauma in pregnancy requires a multidisciplinary approach so that maternal and fetal condition is optimized timely, managed appropriately and judiciously to achieve best outcome.

Keywords: traumatic brain injury, Pregnancy, anesthesia

References

1. Reddy SV, Shaik NA, Gunakala K. Trauma during pregnancy. J Obstet Anaesth Crit Care 2012;1:3–9
2. Satapathy MC, Mishra SS, Das S, Dhir MK. Emergency management strategy for pregnant head trauma victims-case report and review of literature. Indian J Neurotrauma 2014;11:45–48

A037 Anesthesia for Surgical Decompression of Pott's Spine in Pregnancy with Lung Isolation Technique: An Interesting Case Report

Sukanya Khan,[1] Veena Ganeriwal,[1] Paulomi Dey[1]

[1]*Department of Anesthesiology and Critical Care, Grant Government Medical College & Sir J. J. Groups of Hospital, Mumbai, Maharashtra, India*

Introduction: Spinal tuberculosis (Pott's disease) during pregnancy is reported to be rare and can be associated with destruction of the intervertebral disc and adjacent vertebrae that can lead to cord compression and thereby paraplegia or quadriplegia. Awareness of signs and suitable investigations may be delayed due to pregnancy, as patient and clinician may attribute these to the gravid state. Timely surgical decompression can lead to favorable prognosis and good outcome of pregnancy. It can be a diagnostic and therapeutic challenge to successfully maintain the balance between the physiological demands of the mother and the fetus during anesthesia and surgery. The existing literature is limited and inconclusive regarding general anesthesia using double lumen endotracheal tube with lung isolation technique in the surgical decompression of Pott's spine during pregnancy.

Methodology/Description: Our patient was 26 weeks primigravida with D3-D5 Pott's spine with paraparesis who underwent D4 corpectomy with D3–D5 fusion through transaxillary transthoracic approach. We describe the successful management of this patient in the left lateral position under general anesthesia with one lung ventilation with due maintenance of hemodynamic stability and oxygenation of the mother and fetus.

Conclusion: Our case demonstrates that surgery for Pott's spine can be safely performed through transthoracic approach with single lung ventilation technique thorough monitoring of oxygenation, ventilation, acid–base balance, and hemodynamics of the mother and fetus.

Keywords: Pott's spine, pregnancy, one lung anesthesia

References

1. Kaul R, Chhabra HS, Kanagaraju V, et al. Antepartum surgical management of Pott's paraplegia along with maintenance of pregnancy during second trimester. Eur Spine J 2016;25(4):1064–1069
2. Han IH, Kuh SU, Kim JH, et al. Clinical approach and surgical strategy for spinal diseases in pregnant women: a report of ten cases. Spine (Phila Pa 1976) 2008;33(17):E614–E619

A038 Assessment of Changes in Endotracheal Tube Cuff Pressure during Anterior Cervical Spine Surgery and its Postoperative Effects: A Prospective Observational Study

Avani Deosthale,[1] Vikas Karne[1]

[1]*Department of Anaesthesiology, Sahyadri Superspeciality Hospital, Pune, Maharashtra, India*

Introduction: During anterior cervical spine surgeries, retraction applied can increase endotracheal tube (ETT) cuff pressure causing complications.

Methodology/Description: Ethical committee approval and patient consent was obtained. Twenty patients, 18