regime. Dexmedetomidine infusion is both efficacious and safe in endonasal pituitary decompression surgery.

Keywords: dexmedetomidine, endonasal transsphenoidal resection, hemodynamic parameter

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A007 Prone Position Ventilation in a Patient of Severe ARDS with Raised Intracranial Pressure

Hemanth Waghmare,[1] M. M. Harish,[1] Durgesh Satalkar,[1] Pavan K. Vala,[1] Mahendra Bagul,[1] M. Nitin,[1] B. M. Ramya,[1] K. Rajesh[1]

[1]*Department of Critical Care Medicine, Yashoda Hospitals, Secunderabad, Telangana, India*

Introduction: Acute respiratory distress syndrome (ARDS) is common clinical problem in intensive care patients. It is characterized by high mortality. The mainstay of treatment is lung protective ventilation. Current evidence supports prone position ventilation in patients with ARDS having P/F ratio < 150. The only absolute contraindications stated for prone position ventilation are unstable vertebral fracture and unmonitored or significantly raised intracranial pressure.

Methodology/Description: A 27-year-old male was admitted after a road traffic accident with a left fronto-temporo-parietal subdural hemorrhage with diffuse cerebral edema and bilateral diffuse pulmonary contusion. He was intubated in view of poor neurological status. He underwent decompressive craniectomy for raised intracranial pressure (ICP). In due course, he was tracheostomized. Later on, he developed bilateral chest infiltrates with hypoxia. He was diagnosed as severe ARDS (PF ratio < 100). He was decided for prone position ventilation. He was ventilated for 20 hours in prone position and 4 hours supine position in a day. After turning supine, ABG was done after 4 hours. Next session of proning was determined if PF ratio still < 150. He was given prone ventilation sessions daily for 5 days. After fifth proning, his oxygenation improved and further he did not require prone ventilation. Subsequently, he was decannulated and discharged without any neurological sequelae.

Conclusion: Proning can be safely considered in neurotrauma patients with severe ARDS on case to case basis.

Keywords: acute respiratory distress syndrome, neurotrauma, prone position ventilation, intracranial pressure

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A008 Comparative Analysis of Effect of Pressure-Controlled and Volume-Controlled Ventilation on Respiratory Mechanics and Hemodynamics in Patients Undergoing Lumbar Spine Surgery in Prone Position

Divya Gupta[1]

[1]*Department of Anaesthesiology, SMS Medical College, Jaipur, Rajasthan, India*

Introduction: General anesthesia in prone position is related with increased airway pressure, decreased pulmonary, and thoracic compliance.

Aim: To compare pressure-controlled (PCV) and volume-controlled (VC) ventilation in patients undergoing lumbar spine surgery in prone position.

Methodology/Description: After ethics committee approval and written informed consent, a comparative randomized interventional study was conducted from March to June 2017. Patients were randomized in two groups of 30 each using sealed envelope method with 80% power and 97.5% confidence interval of the study. Patients of either sex, ASA grade I and II, age 20 to 65 years were included, while those with severe pulmonary disease and BMI > 30 kg/m^2 were excluded. Mean and standard deviation were calculated for quantitative data while proportions for qualitative data. For significance of difference, chi-squared test was used for proportions and unpaired *t*-test for mean. A *p*-value of < 0.05 was considered to be significant. Peak airway pressure (P-peak), PaO_2 levels, $PaCO_2$ levels, mean airway pressure, dynamic compliance, heart rate, systolic blood pressure, diastolic blood pressure, and mean arterial pressure were measured.

Results: Demographic parameters and perioperative hemodynamic values were comparable with no significant statistical difference. The P-peak levels were significantly higher in Group VC as compared with Group PC ($p < 0.05$). Dynamic compliance levels during prone position were higher in Group PC when compared with Group VC. Postoperative PaO_2 level was significantly higher in Group PC compared with Group VC.

Conclusion: According to our study, PCV mode is associated with lower P-peak levels during prone position and better oxygenation postoperatively. We concluded that PCV mode might be more appropriate in prone position during anesthesia.

Keywords: anesthesia, PCV, VC

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A009 Case Report: Near Accidental Extubation in a Case of Juvenile Scoliosis Associated with Neurofibromatosis during Elongation-Derotation-Flexion Casting

Manali Choudhary,[1] Madhvi Buddhi[1]
[1]*Department of Anaesthesia, Seth G. S. Medical College and KEM Hospital, Mumbai, India*

Introduction: Elongation-derotation-flexion (EDF) casting is emerging as a promising nonsurgical technique for the treatment of infantile and juvenile scoliosis, involving a custom-made thoracolumbar cast that acts simultaneously in the frontal, sagittal, and coronal planes. Latest studies have found that general anesthesia along with muscle relaxants have provided better results for casting. The anesthetic complications of this procedure are concerned with the temporary procedural chest pressure making ventilation difficult, while the cast is being set.

Methodology/Description: A 6-year-old male child, known case of neurofibromatosis with café-au-lait spots, the Lisch nodules, and severe thoracolumbar kyphoscoliosis, was posted for casting of kyphoscoliosis. Patient was given general anesthesia with muscle relaxant and was intubated with 5.5 mm uncuffed endotracheal tube with throat pack. Air entry was bilaterally equal and there was no audible leak. Patient was placed on improvised reduction apparatus comparable to the Cotrel frame and was given axial correction of spine. Subsequently, entire trunk was plastered and thoracoabdominal window was cut. As soon as the spine was subjected to elongation traction, it was noted that there was an audible leak around ETT. But as the ventilation was possible, procedure was allowed to be completed. Check laryngoscopy done prior to reversal revealed that the level of the tube was at the level of vocal cords, confirming the migration of tube in trachea despite of proper fixation.

Conclusion: Anesthetic concerns reported till now related to EDF casting have been mostly regarding temporary increase in inspiratory peak pressure. Auscultation of chest and visualization of chest expansion in post-EDF casting becomes difficult. This could be the first case report encountering relative change in position of endotracheal tube, probably due to elongation of the trachea during traction correction of spine.

Keywords: EDF, Lisch nodules, laryngoscopy

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A010 A Case Series Elucidating the Anesthetic Management of Brachial Plexus Injury Repair: A Three-Year Review of Our Institutional Experience

Joanna Rodrigues,[1] Hetal Rathod,[1] Hitesh Nathani,[1] Shwetal Goraksha,[1] Joseph Monteiro[1]
[1]*Department of Neuroanaesthesia, P. D. Hinduja Hospital Mahim, Mumbai, Maharashtra, India*

Introduction: A brachial plexus injury (BPI) could be one of the most devastating injures to a patient effectively crippling function and potentially leading to unemployment, hardship and depression. With modern techniques in hand along with microsurgery and individualized anesthetic techniques, it is totally feasible to restore function in this valuable segment of our population.

Methodology/Description: Information of BPIs from 2015 to 2017 was obtained from the Department of Anesthesia, P. D. Hinduja Hospital, Mumbai, using the Anesthesia Record Keeping System. We operated upon 48 cases in the year 2015, 64 cases in the year 2016, and 45 cases till date in the year 2017. Out of these, four were position-related iatrogenic injuries.

Conclusion: Successful management of a case of BPI involves a balanced approach involving TIVA, inhalational agents along with monitoring of the depth of anesthesia and neuromuscular monitoring. Drugs should be well-titrated to avoid awareness and present a deep plane of anesthesia without using muscle relaxants.

Keywords: brachial plexus injury, anesthetic management, BPI

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A011 A Retrospective Analysis of Perioperative Factors affecting Outcome in Children with Cervical Spine Injury

Ankur Khandelwal,[1] Vikas Chauhan,[1] Gyaninder P. Singh,[1] Girija P. Rath[1]
[1]*Department of Neuroanaesthesiology and Critical Care, All India Institute of Medical Sciences (AIIMS), New Delhi, India*

Introduction: Not much has been described about perioperative factors affecting outcome in children cervical spine injury (CSI).

Methodology/Description: Data of children (age ≤ 18 years) with CSI who underwent surgery during a period of 7 years were reviewed, retrospectively. Various factors affecting outcome were included in the study.

Results: A total of 112 children with CSI received surgical treatment during the study period. Sixteen children were in the age group of 0 to 8 years, whereas 96 belonged