



## Editor's Note: Journal of Anesthesia & Clinical Research (Volume 8 Issue 2)

Krzysztof Laudanski\*

Department of Anesthesiology and Critical Care, University of Pennsylvania, USA

\*Corresponding author: Krzysztof Laudanski, Department of Anesthesiology and Critical Care, University of Pennsylvania, USA, E-mail: Krzysztof.Laudanski@uphs.upenn.edu

Received date: May 23, 2017; Accepted date: May 25, 2017; Published date: May 26, 2017

Copyright: © 2017 Laudanski K. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Editorial Note

Use of anesthesia in major or minor invasive operations has showed the gift of 'painless' surgery to the mankind. The safety and security related to the administration of anesthetic drug needs expertise and utmost care, which is the crucial regime in the anesthesia research. Apart from dose and weight relationship, secondary reactions of the drug into the patient's system are also the debatable issue in the selection of appropriate anesthetic drug for the induction of unconsciousness. The present Journal of Anesthesia and Clinical Research provide the platform for detail discussion on the recent topics coming out from rigorous academic and clinical research. The journal considers articles from all aspect of understanding related to anesthesia, which includes local anesthesia, sedation, regional anesthesia, anesthetic agents, cardiac anesthesiology, nerve blocks, spinal, epidural and caudal anesthesia, general anesthesia, and many more. The Journal of Anesthesia and Clinical Research in its present issue i.e., Volume 8, Issue 2, discussed several topics, which includes the feasibility of separating a patient from a LVAD without any major re-operative intervention [1], anesthetic property of magnesium sulfate [2], comparative efficacy study between guardian SAD and other SADs [3], utility of CPR skills in undergraduate and postgraduate dental courses [4], unusual events in peripheral nerve block catheter [5], dose detection of dexmedetomidine for skin closure with less stress response [6], and the significance of planning difficult airway management to improve the tactic in clinical context.

Jia et al. [1], described the anaesthetic management in a 49-year-old patient with idiopathic dilated cardiomyopathy, who was on a left ventricular assist device (LVAD) support for 19 months coming for percutaneous decommissioning after complete myocardial recovery. In this case, the indication for mechanical assist device separation was myocardial recovery, which occurred following 19 months of LVAD support. Anaesthetic goals include the maintenance of sinus rhythm with avoidance of myocardial depression and increase in systemic vascular resistance (SVR), having an optimal blood pressure control, and cautious fluid management. Hence, this case report demonstrates the feasibility of separating a patient from a LVAD without the need for a major re-operative intervention.

The transversus abdominis plane (TAP) is a nerve block, used to anesthetize the sensory nerves by anesthetic injection. Though, magnesium sulfate can avert the induction of central sensitization at the site by blocking N-methyl-D-aspartate (NMDA) receptors. Amin et al. [2], compared the effects of Magnesium sulfate *versus* ultrasound guided block on hemodynamics, and postoperative analgesia in patients undergoing colorectal surgical operations. This study was conducted on 40 adult patients and it is concluded that, the preoperative administration of a single dose of magnesium sulfate (50 mg/kg) *versus* preoperative ultrasound guided bilateral transversus abdominis plane block in patients undergoing colorectal surgery with

less postoperative nausea, vomiting and shivering in the magnesium sulfate group.

The purpose of the study by Li et al. [3], was to further characterize the efficacy of the Guardian a second generation supraglottic airway device in a tertiary hospital setting, and to identify factors that may contribute to its success or failure. The authors have hypothesized that, the success rate of insertion for the Guardian is comparable to those of other SADs reported in the literature. Hence, a cross-sectional pilot studies for over a period of two-months on 67 operative cases that used the Guardian supraglottic airway at the Northern Hospital, Australia was conducted. It was seen that; the overall success rate was 78% and a positive association between 'prior experiences' with the 'Guardian' was observed. Successful insertion is associated with greater ease with insertion. The most popular insertion technique is sideways-and-rotate. Therefore, author concluded that, the Guardian SAD demonstrated similar efficacy to other SADs as reported in the literature.

The need of emergency intercessions in dentistry is common and side effects due to local anesthetics are encountered emergencies. In similar emergencies, cardiopulmonary resuscitation (CPR) may be required to ensure the continuity of the patient's respiration and circulation. The knowledge and experience of cardiopulmonary resuscitation can save a patient's life. However, due to inadequate training and the failure of dentists to refresh their knowledge via education programs, many dentist practitioners may be unable to perform CPR correctly. Hence, Torun [4], carried out questionnaire-based study aimed to evaluate the CPR knowledge and experiences of Turkish trainee dentists and research assistants at the Faculty of Dentistry of Ondokuz Mayıs University in Turkey. Therefore, author says to ensure that, dentists are able to manage medical emergencies and patient safety through training on CPR skills, which should be mandatory in all undergraduate and postgraduate dental courses.

Vissa et al. [5], assume that, the guide-wire might have been entrapped in the internal coil or soldered as a manufacture defect. Fortunately, the distal end of the coil and the plastic sheath were intact which prevented significant complications to the patient. If the guide-wire had cracked or broken at a more distal location close to the site of insertion the extraction process could have been complicated with tissue damage. It is always prudent to do a thorough inspection of the equipment prior to usage and it is also very difficult to identify by inspection prior to insertion. In clinical practice, incidence of such incidents commands careful assessment of the patient to look for retained pieces of sheath or guide-wire in the patient which will have will have infectious as well as legal implications. Hence, author reported an unusual shearing of the internal coil in a stimulating peripheral nerve block catheter.

Emergence agitation develops during the recovery stage from general anesthesia resulting in confusion, and unpredictable

behaviours. Surgical stress response activates the nervous system and the release of catabolic hormones increases leading to prolonged hospital stay. Mostafa et al. [6], designed this study to evaluate the effect of various doses of intra-operative dexmedetomidine infusion on surgical stress response, emergence agitation and postoperative outcome conducted in Assiut University Hospitals, Egypt. Author concluded that, the low doses of dexmedetomidine infusion (0.5 µg/kg) over 20 minutes before skin closure are effective to decrease stress response and emergence of agitation in laparoscopic cholecystectomy in adults showing less adverse effects.

For an anaesthetic operation, the number of procedures in remote places has increased as a challenge. The most common difficulties are respiratory events often done by over sedation. In remote places, a 'can't ventilate can't intubate' scenario is worrisome. Author Pinho et al. [7], presented a patient scheduled for percutaneous endoscopic gastrostomy under monitored anaesthesia care who represented a 'can't ventilate, can't intubate' scenario and a rescue approach was used to maintain patient oxygenation. The case highlights the significance of planning difficult airway management, describing alternative plans, and knowing in advance the equipment available. The paper draws attention towards the aspects that could be improved in the tactic of a similar case that could happen again in this clinical context.

## References

1. Jia JT, Shitalkumar S, Harikrishnan K (2017) Effective Illustration of Decommissioning of Left Ventricular Assist Device after Bridge-to-Recovery by Hybrid Minimally-Invasive Tactic: Anesthesia Substances. J Anesth Clin Res 8: 702.
2. Amin SM, Mohamed RM (2017) The Effect of a Preoperative Single Dose of Magnesium Sulfate versus Preoperative Ultrasound Guided Bilateral Transversus Abdominis Plane Block on Hemodynamics and Postoperative Analgesic Requirements in Patients Undergoing Colorectal Surgery. J Anesth Clin Res 8: 703.
3. Li MHG, Tang HHH, Bouniu CJ, Chan JK (2017) A Cross-Sectional Study Evaluating the Guardiancpv™ Supraglottic Airway Device in a Clinical Setting. J Anesth Clin Res 8: 704.
4. Torun AC (2017) Assessment of Dental Students' Cardiopulmonary Resuscitation Knowledge and Experience in Turkey. J Anesth Clin Res 8: 705.
5. Vissa D, Ganapathy S (2017) An Unusual Shearing of the Internal Coil of a Stimulating Peripheral Nerve Block Catheter. J Anesth Clin Res 8: 706.
6. Mostafa MF, Herdan R, Aly MYF, Elfadle AA (2017) Effect of Different Doses of Dexmedetomidine on Stress Response and Emergence Agitation after Laparoscopic Cholecystectomy: Randomized Controlled Double-Blind Study. J Anesth Clin Res 8: 707.
7. Pinho D, Costa L, Sa S, Cruz F, Costa A, et al. (2017) A Can't Ventilate, Can't Intubate Scenario in a Remote Location: A Case Report of a Rescue Approach. J Anesth Clin Res 8: 708.