

Anaesthesia for Robotic Surgery: Patient Positioning, Ergonomics and Clinical Pearls

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Abstract

Robotic surgery has revolutionised patient management and opened newer doors for the anaesthesiologists regarding patient safety. Patient positioning and operation theatre (OT) configuration assumes unique importance for robotic surgery due to multiple factors. First and foremost, the position cannot be changed once the robot is docked. Further, adequate surgical exposure requires extreme positioning and revamping of the existing positioning devices. In addition, there is restricted access to the patient and its antecedent problems. Last, but not the least, space restriction and protection of patient from the clashing robotic arms requires special devices and several unfavourable position modifications. Position related nerve palsies, pressure ulcers, port site necrosis, venous thrombosis and other injuries are on the rise in the recent years and appropriate measures may make it largely preventable. Extreme positioning causes physiological changes necessitating changes in ventilatory strategies and anaesthetic techniques. Our experience of providing perioperative and anaesthetic care for more than 3000 robotic surgeries (various surgical disciplines) has helped us to highlight the major positioning associated deficiencies and anaesthetic and other problems during robotic surgeries. We have also attempted to find practical solutions for the same and to define the best practices for robotic positioning using a thorough review of literature..

Biography:

Shagun Bhatia Shah is a motivated and dedicated anaesthesiologist with seventeen years of experience in anaesthesia and over 50 publications in various international peer reviewed journals. Her interest in oncoanaesthesia drove her to practice as a consultant at RGCI&RC. Her specific interests include recent advances in anaesthesia like USG-guided nerve blocks, difficult airway and anaesthesia for robotic surgery. She is certified in TOE (Trans oesophageal echocardiography) use and utilizes it for managing cardiac patients undergoing non-cardiac oncosurgery. She has successfully conducted clinical trials like “Optic Nerve Sheath Diameter Guided Non-Invasive ICP Measurement In Patients Undergoing Robotic Surgery In Steep Trendelenberg Position” and is presently conducting the trial “TOE for intraoperative goal directed fluid therapy in cardiac patients undergoing non cardiac oncosurgery and robotic surgery in ST-position” among others. She is ready to walk that extra mile with post-operative and terminally ill cancer patients to alleviate their pain and suffering.

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