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The Anaesthesiologist as the Guardian of Asepsis.

Dr Rajesh M C

Senior consultant Anaesthesiologist & Academic coordinator,
B M H Calicut, Kerala.

E mail: rithraj2@yahoo.co.in

Access This Article Online



Website:
theanaesthesiologist.com

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The role of the modern anaesthesiologist has evolved far beyond the administration of hypnotic agents. Today, we function as perioperative physicians, pain specialists, and most critically the principal custodians of the sterile operation theatre environment. As regional anaesthesia continues to advance from conventional neuraxial techniques to increasingly sophisticated ultrasound-guided blocks, the mandate for rigorous aseptic practice has never been more critical.

Invasive procedures define much of our day-to-day work. Whether performing a central neuraxial block, inserting a central line, or delivering interfascial plane and plexus blocks, we intentionally breach the body's most formidable line of defence: the skin. The prevailing assumption that peripheral nerve blocks are "low risk" in comparison with spinal anaesthesia is a perilous misconception. There exist a potential for secondary infections originating within fascial planes though rare, can be equally challenging and add to the perioperative morbidity of the patient.

Strict observance of maximal barrier precautions, scrupulous hand hygiene, sterile glove use, appropriate facial protection, and meticulous skin preparation must constitute non-negotiable fundamentals rather than optional refinements. Our obligations extend beyond flawless technique in the operative

field to encompass perioperative antibiotic stewardship. The timing of prophylaxis—administered within 30–60 minutes before incision—and, when clinically indicated, timely intraoperative redosing are decisive in mitigating Surgical Site Infections (SSIs)¹. Increasingly, emerging data indicate that a substantial proportion of avoidable postoperative morbidity may be linked to sub-therapeutic antibiotic concentrations during prolonged procedures². Situated at the head of the operating table, the anaesthesiologist is uniquely positioned to safeguard these therapeutic windows with precision and reliability.

Moreover, the widely endorsed framework of Enhanced Recovery After Surgery (ERAS) seeks to mitigate postoperative infectious complications by maintaining normothermia, ensuring effective oxygenation, optimizing glycaemic regulation, and enforcing stringent infection-control measures³. As perioperative physicians, we must uphold exemplary hand hygiene not only immediately before the procedure, but also prior to every patient assessment and again at the point of anaesthesia induction⁴. An often underestimated, yet profoundly indispensable, element of our routine practice is the scrupulous decontamination of the anaesthesia workstation and all associated equipment. Anaesthesiologists should be vigilant wherever an indwelling catheter is used and the same strict

aseptic precautions should be continued till the catheter is removed⁵.

We must cultivate a culture in which the prevention of asepsis is treated with the same seriousness as the management of a difficult airway. Complacency in professional work can lead to catastrophe. As leaders within our specialty, we should advocate for standardized protocols that render every needle visualization and every antibiotic bolus an indispensable link in the chain of patient safety. Our legacy should not be limited to the assurance that the patient awoke safely, pain-free, and comfortable—but rather that they remained protected from infection, whole, and intact under our vigilant care. Asepsis is not optional; it constitutes a defined clinical duty of anaesthesiologist!

REFERENCES: (2021-2026)

1. Lakkanna A, Rajender G, Sakaray YR, Tandup C, Khare S, Savlania A, Kajal K, Varma P, Gupta A, Kaman L. Impact of the timing of antibiotic prophylaxis on the surgical site infections in patients undergoing elective general surgery. *Indian J Pharmacol.* 2025 Sep 1;57(5):334-7.
2. Dhole S, Mahakalkan C, Kshirsagar S, Bhargava A. Antibiotic prophylaxis in surgery: Current insights and future directions for surgical site infection prevention. *Cureus* 2023 Oct 28;15 (10):e47858.
3. Cai Y, Cai X, Zhang X, Zhu J, Chen W. Impact of enhanced recovery after surgery protocols on surgical site wound infection rates in urological procedures. *Int Wound J.* 2024 Jan;21(1):e14582.
4. Loftus RW, Muffly MK, Brown JR, Beach ML, Koff MD, Corwin HL, Surgenor SD, Kirkland KB, Yeager MP. Hand contamination of anesthesia providers is an important risk factor for intraoperative bacterial transmission. *Anesth Analg.* 2011 Jan;112(1):98-105.
5. Jamaledin Ahmad F A, Herrera J A, Saldanha J M, et al. (February 02, 2026) Ultrasound-Guided Regional Anesthesia: A Narrative Review of Techniques, Safety, and Clinical Applications. *Cureus* 18(2): e102822. DOI 10.7759/cureus.102822