TIVA/TCI in the heart of ERAS

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Objectives

- 1. Brief account of TIVA/TCI and its evidence based advantages.
- 2. Brief account of ERAS concept and the philosophy of its importance in the modern surgical care and peri- operative medicine.
- 3. The art of proper selection of the right surgical procedure , the right patient , and the right anesthetic technique to achieve the goals of ERAS

Conclusions:

ERAS® stands for Enhanced Recovery After Surgery. ERAS is a multimodal perioperative care pathway designed to achieve early recovery for patients undergoing major surgery. ERAS represents a paradigm shift in Perioperative care in two ways. First, it reexamines traditional practices, replacing them with evidence based best practices when necessary. Second, it is comprehensive in its scope, covering all areas of the patient's journey through the surgical process. The key factors that keep patients in the hospital after surgery include the need for parenteral analgesia, the need for intravenous fluids secondary to gut dysfunction, bed rest caused by lack of mobility. The central elements of the ERAS pathway address these key factors, helping to clarify how they interact to affect patient recovery. In addition, the ERAS pathway provides guidance to all involved in Perioperative care, helping them to work as a wellcoordinated team to provide the best care. Use of the ERAS pathway has been shown to: reduce care time by more than 30% and reduce postoperative complications by up to 50% [1]. [1]

Varandhan, KK et al. The enhanced recover after surgery (ERAS) pathway for patients undergoing major elective open colorectal surgery: a meta-analysis of randomized t

TIVA /TCI is one of the most under- used anesthetic techniques to its great potentials .

Anaesthetic depth should be guided either maintaining an BIS index between 40 and 60 with the aim not only to prevent awareness but also to minimize anaesthetic side effects and facilitate rapid awakening and recovery. Avoid too deep anaesthesia (BIS < 45), especially in elderly patients.

Aiming for optimal patient and procedure selection to use TIVA/TCI as the right anesthetic method will certainly achieve the goals of ERAS, thus bring patients back to normal after surgery, markedly improve patient's satisfaction, and at the same time reduce the overall cost.

The immediate challenge to improving the quality of surgical care is not discovering new knowledge, but rather how to integrate what we already know into practice». (Urbach DR, Baxter NN. BMJ 2005)

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