

level below 50–100k (depending on procedure), coagulopathies and inflammation at the injection site.

REFERENCES

1. Amitabh Gulati, Vinay Putanniach, Bran M. Bruel, William S. Rosenberg, Joseph C. Hung; *Essentials of Interventional Cancer Pain Management*; Springer, 2019, p-149.
2. Mantyh PW, Koltzenburg M, Mendell LM, Tive L, Shelton DL. Antagonism of nerve growth factor-TrkA signaling and the relief of pain. *Anesthesiology*. 2011;115:189–204.
3. Mercadante S. Celiac plexus block versus analgesics in pancreatic cancer pain. *Pain*. 1993;52:187–92
4. Noguchi I, Hasegawa J, Kobayashi K, Takahashi H. Pain relief by stellate ganglion block in a case with trigeminal neuralgia caused by a cerebellopontine angle tumor. *Anesth Prog*. 2002;49:88–91
5. Piagkou M, Demesticha T, Troupis T, Vlasis K, Skandalakis P, Makri A, et al. The pterygopalatine ganglion and its role in various pain syndromes: from anatomy to clinical practice. *Pain Pract*. 2012;12:399–412
6. Wilsey B, Teicheira D, Caneris OA, Fishman SM. A review of sympathetically maintained pain syndromes in the cancer pain population: the spectrum of ambiguous entities of RSD, CRPS, SMP and other pain states related to the sympathetic nervous system. *Pain Pract*. 2001;1:307–23.
7. Gulati A, Khelemsky Y, Loh J, Puttanniah V, Malhotra V, Cubert K. The use of lumbar sympathetic blockade at L4 for management of malignancy-related bladder spasms. *Pain Physician*. 2011;14:305–10.

SP16 HOW TO IMPRESS WITH A PPT PRESENTATION?

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The secret to a strong presentation is to have a clear content on one hand and to present it with a powerful attitude on the other hand. To deliver a clear message your slides should be simple and structured. Keep in mind the different personalities in your audience and try to address them all. Cut down on words, pause and make eye contact. Take your time to prepare and own your message instead of trying to prove it.

How to Improve access to RA for all?

This lecture will guide you through the barriers of practical implementation of regional anesthesia in your hospital. To build a regional program you need ‘4T’s’: Teaching, Time, Trust and Team. Regional anesthesia is a subspecialty which requires a thorough theoretical knowledge of anatomy, pharmacology, surgical techniques and evidence on outcome benefits to support your efforts. Training programs need to provide sufficient opportunity to acquire practical skills in basic blocks. Implementing a program requires time and patience to instruct your co-workers and to find the best pathway in your center. Hospital logistics need to support supply of qualitative equipment. It is a team effort to optimize patient care.

SP17 HOW TO MAKE YOUR THORACIC EPIDURAL WORK?

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Introduction Although High Thoracic Epidural analgesia (HTEA) has been replaced as a gold standard in minimal invasive surgical procedures, it still is a viable technique in open major surgery (e.g., vascular, thoracic, abdominal).¹ Performing

a HTEA is difficult to master.² Published failure rates average from moderate to high.^{3,4} Reduced caseloads further diminish training and competence proficiency, augmenting the problem.⁵ We will examine common pitfalls and barriers, while determining factors for success. Finally evaluate novelties to improve favorable results and investigate all modalities to aid successful placement.

Discussion Enhanced Recovery programs and minimal invasive surgical techniques have had a detrimental impact on the choice for thoracic epidural as regional analgesic technique. Multimodal analgesic strategies, including fascial plane blocks, are indeed a key element in modern day low impact surgery.⁶ However, postoperative pain management for major surgery like esophagectomies, thoracotomies, open abdominal aortic surgery and any major open hepatobiliary surgery remain a challenge for anesthesiologists. Even if the effect on morbidity and mortality is controversial, HTEA still has major benefit in reducing opioid consumption combined with a well-known effect on surgical inflammatory cascade.⁷

Aiding Success.

First of all, to adapt to diminishing caseloads it is imperative that modern teaching methods are implemented. Simulators, online tools, webinars, video tutorials can have a tremendous impact on training. A basic (lumbar) epidural simulator is a small investment for any anesthetic department to make, with a great return on investment.⁸ Video-based learning systems have shown to provide some gains.² While online tools like [Virtual Spine: lumbar anatomy, 3D model, vertebra, spinal cord, dura, meninges, cauda equina, ultrasound \(utor-onto.ca\)](http://VirtualSpine.com) have a profound influence on our anatomical knowledge, unfortunately there is currently not enough evidence on beneficial impact on performance.

Secondly ultrasound (US), although not mandatory to perform thoracic epidurals, can make life easier and also increase enthusiasm of young colleagues for the technique. US has not proven to increase success rates yet, however it facilitates identifying midline and familiarize the unfamiliar with the anatomy.⁹

Thirdly the thoracic epidural should be taught properly with respect to all small clinical pearls. Positioning, preparation, adequate communication, effective local anesthesia, organization and adaptation are extremely important and will probably be the best advice to improve your prowess. A locoregional fellowship where a sufficient number of thoracic epidurals are still placed is your best bet when fishing for these pearls.¹⁰

Lastly the loss of resistance technique is a subtle art indeed. Even with excellent coaching and teaching, this skill cannot be easily transferred to the onlooker. To help ascertain a correct loss of resistance technique there are some tips and tricks up our sleeves. The hanging drop approach can help needle advancement meticulously and carefully, while using both hands. Various spring-loaded syringes have also been developed to aid the developing skills. Results with these devices have been mostly mixed.¹¹

Ascertaining success.

As described above, assistance of clinical pearls in ascertaining the accurate placement of an epidural needle and catheter play a crucial role. Generally, you can scrutinize three different clinical questions. Was the loss clear? Was the threading of the catheter easy (or even possible) and did patients feel a slight paresthesia while threading the catheter? And finally, is saline column in the epidural catheter dropping steadily when elevated?