

Advanced Minimally Invasive Techniques for Treatment of Complex Chronic Pain in Pakistan

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Chronic pain is not only agonizing for the patient but also has both physiological and psychological adverse effects.

In addition, chronic pain also results in burdening a person financially and limiting his/her ability to complete his/her work hours. The complex nature and types of chronic pain cannot be managed by any single treatment. There is always the addition of new modalities and ideas for management. Epiduroscopy and adhenolysis, RFA though are used for few years in developed countries with success but are relatively new in Pakistan

Chronic low back pain represents one of the major causes of disability worldwide. Treatment of chronic low back pain is complex due to its multifactorial etiology.¹⁻² Multiple modalities have been used to treat chronic low back pain. New techniques have been used by interventional pain physicians. Epiduroscopy is among one of them.³

It is a new, minimally invasive, diagnostic, and therapeutic technique for the Visualization of epidural space with an endoscope. It allows visualization of normal anatomical structures such as dura matter, blood vessels, connective tissues, nerves, and fatty tissues as well as pathological structures, such as adhesions, inflammatory processes, fibrosis, and stenotic changes.³

Major indications of Epiduroscopy includes differentiation between pathological and anatomical structures, Post laminectomy syndrome, Lumbar spinal stenosis, Lumbar radiculopathy, Post-operative epidural adhesions, chronic refractory back pain, and FBSS.⁴

Most of these patients benefit significantly from this minimally invasive technique, some of our patients with

severe disease or multiple diseases and unfit for major spinal surgery had significant or complete pain relief.

After consent and pre-procedure assessment, the patient is positioned prone. Tuohy needle is inserted through sacral hiatus under a fluoroscope, followed by insertion of small guide wire through needle and needle is pulled back. A dilator is then used to create enough opening to pass Epiduroscope. A small catheter with a fiber optic camera at its tip is passed through this opening. This helps visualize exactly where the catheter is being passed. Once the catheter is in place it is gently maneuvered to break down adhesions.

Adhenolysis is done by maneuvering the catheter itself, with hypertonic saline and hyluronidase.

After the procedure, the patient is monitored for two hours and then discharged home.

RFA (radiofrequency ablation) is a non-surgical minimally invasive method that uses heat to stop transmission of pain to the brain providing long term relief to patients whose pain is refractory to most conventional modalities.⁵ This is done without the use of steroids or any other drug.

It is especially useful for patients who have fear of side effects of steroids and other drugs like hypertensive and diabetics.

This modality is being used in advanced countries for many years successfully for moderate to severe chronic pain. It is effective in almost all types of chronic intractable pain e.g. knee pain, trigeminal neuralgia, and back pain.⁵

In Pakistan, RFA is a new modality. This effective modality to manage chronic pain has been installed at

very few centers in Pakistan and is being successfully used.

Our mission is to provide effective pain relief to deserving patients free or at a minimal cost. Our patients with refractory pain treated with this modality had significant or complete pain relief. With this success, we are using this novel modality regularly.

Keywords: Pain Management, Epiduroscopy and adhenolysis, radiofrequency ablation

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