

Percutaneous Endoscopic Lumbar Discectomy: Update on Modern Techniques for Lumbar Disc Surgery



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There are so many causes of low back pain but still lumbar disc herniation remains the entity that concerns both patients and doctors being so common and leading to disabling residual neurological deficits that reflect on the patient's ability to resume regular daily activities and affect his productivity.

Not all lumbar disc herniations require surgical treatment, it is estimated that about 10% of patients will eventually need surgery. When it comes to surgery, the golden standard for decades has been the classical open laminectomy and excision of the herniated fragment of the lumbar disc... this requires general anesthesia, open incision in the middle of the back cutting thru muscles, ligaments and bone, retraction on the Dura (the sac of spinal nerves) and mobilization of the pinched nerve itself...thus although the success of this surgery is good with relief of symptoms in 85% of cases yet the complications of open surgery are there... such as the complication of having general anesthesia, bleeding and loss of blood, injury to the Dura or nerve root, postoperative infection and postoperative pain with slow recovery that may take weeks.

Over the last few years the open surgery technique was modified with bringing in the "operative microscope" to have better visualization and make the incision smaller and the tissue damage less... this did improve the results

and shortened the recovery time... yet it is still an open surgery that requires general anesthesia and with the same complications as open technique...

What is new? Percutaneous Endoscopic Lumbar Discectomy

This is a modality of surgery for excision of the herniated fragment of the lumbar disc where the surgery can be done under local or general anesthesia thru a skin puncture without dissection of tissues thru the midline (Interlaminar approach) or away from the midline of the back (Transforaminal approach) going to the disc under x-ray control in the operating room, putting a small tube thru the skin down to the disc and inserting a special endoscope with fibro-optic light thru which special manual instruments and a radiofrequency probe are introduced to remove and melt the disc fragment.



Fig1. Intraop X-ray control



Fig.2. Interlaminar Lumbar Approach



Fig.3. Transforaminal Lumbar Approach

After surgery, the pain immediately disappears and the patient gets up and walks and can go home the same day of surgery. He is able to resume his daily outdoor regular activities in 10 days and is back to normal in 3 weeks.

This type of surgery is not new, it has been there since the 80's and started to improve with new instrumentation and techniques. Ten years ago, with the help of new scopes and improved technology, the results improved to yield a 95% good results and broadened the indication to be applicable to almost all cases of lumbar disc herniation with almost nil serious complications.

The satisfaction of patients having the surgery is so promising that it will make Percutaneous Endoscopic Lumbar Discectomy the golden standard of the future disc surgery and only very few cases will still need to have open surgery if any. The well trained surgeon will chose the proper approach that can give the best result for

the patient. Currently, with continuous improvements, all cases will benefit from this technique and it will be very soon that patients will demand having this surgery making therefore the open surgery outdated.

Labib Medical Center, a pioneer hospital in Percutaneous Endoscopic Disc Surgery was the first in Lebanon to introduce this procedure in 2010. Since then, we have done more than 400 cases. The outcome of surgery was excellent and patient satisfaction was great and encouraging. Currently we are looking forward to starting our Hands-on Training Course on Percutaneous Endoscopic Spine Surgery so that spine surgeons from Lebanon and the Middle East will have the chance to learn more about the procedure. It is a demanding procedure to learn, thus it needs adequate training and special equipment and only spine surgeons familiar with percutaneous spine techniques should be doing it.

Infos

Bientôt un Médicament Générique pour l'Hépatite B

Le laboratoire Pharma 5 se prépare à lancer un médicament de dernière génération, 100% marocain pour le traitement de l'hépatite B. Le laboratoire a annoncé avoir officiellement déposé son dossier d'autorisation de mise sur le marché (AMM) du générique, «équivalent en terme de qualité, d'efficacité et de sécurité au princeps de référence prescrit pour la prise en charge de l'hépatite B». «Après le succès thérapeutique du SSB 400, les professionnels gastro-entérologues se sont tournés vers nous pour nous faire part du besoin pressant d'un médicament générique pour la prise en charge de l'hépatite B.

Le princeps n'étant pas protégé par un brevet de propriété intellectuelle au Maroc, nos équipes de recherche et de développement ont travaillé d'arrache-pied pour analyser le médicament princeps et reconstituer un médicament générique identique», explique Myriam Lahlou-Filali, directrice générale de Pharma 5. Une bonne nouvelle donc pour les 600.000 Marocains atteints de cette maladie, d'autant plus que le générique sera proposé à un prix dix fois inférieur à celui du médicament princeps, qui n'est pas commercialisé au Maroc. En effet, les



patients étaient jusqu'à obligés de se le procurer depuis l'étranger, ce qui occasionnait des frais élevés et des procédures compliquées. En revanche, les malades ne pouvant pas se procurer ce médicament à l'étranger se contentent, selon le laboratoire, de molécules chères et moins efficaces à long terme. «Nous espérons pouvoir mettre le plus rapidement possible ce médicament sur le marché afin de répondre à la souffrance de milliers de patients dans notre pays. Tout comme l'hépatite C, l'hépatite B est une maladie silencieuse qui peut devenir mortelle en l'absence de prise en charge adéquate. Notre objectif aujourd'hui est donc de proposer un traitement efficace et accessible aux porteurs du virus»