Commentary article

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The Percutaneous Endoscopic Lumbar Interbody Fusion (PELIF) in a Spine Gunshot Wound Case

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Description

The Gunshot Wounds (GSWs) are an increasing cause of morbidity and mortality, especially in developing countries where they represent a public health problem. These injuries are very common in young men and frequently the patients have complete neurological deficit. The social costs are increased, with high rates ofwithout reserve of) public spending and difficult strenuous medical conduction (strenuous medical conduction). The search for better results and early patients recover, with rapid hospital discharge are necessary (A pressing search for better results and faster clinical recovery of patients is needed). For this worrisome problem. The Percutaneous Endoscopic Lumbar Interbody Fusion (PELIF) It"snt possible to change, because It"s the technique"s name) is a new and advanced option to comes as a new treatment proposal) treat it. This study describe a case that used this alternative care [1].

Surgical Technique

The radiography, tomography and MRI pre-operative show the interest area and the entry point distance to be puncture. The exact measurement of the midline to make the inlet puncture, thus avoiding addressing other areas or making unnecessary resections.) This avoid unnecessary resections or neural tissue manipulations(as the same/ the exact measurement of the midline to make the inlet puncture, thus avoiding addressing other areas or making unnecessary resections [2].

The patient under general anestesia and (Through the use of general anesthesia) with the use of the image enhancer, the puncture is done with an 18G needle we make an initial puncture with spinal needle anesthesia and radioscopy. The vertebral body accessed is through the postero lateral route, followed by a guide wire positioning, through the needle, sliding it to the center of the(way, using the needle and a guide wire, sliding inside it, to the central region of) the vertebral body. Successive dilators are placed on the guide wire and a beveled working cannula(We then used a final working cannula that) (7.1mm of inner diameter. It"snt possible to change, because It"s the technique's name. is placed on the dilators, which(slid over the dilators and guidewire) are then removed, and the endoscope (6.9 mm of outer diameter, 6.1 mm of working channel, and 20° view angle It"snt possible to change, because It"s the technique"s name.) is inserted. The endoscope permit direct vertebral body lesion visualization and the surrounding neural structures, (Neighboring neural structures and vertebral injury are immediately seen.) with to approach and resect just necessary, without neural manipulations and avoiding instability or postoperative fibrosis(postoperative fibrosis or instability is prevented with a limited resection required). Initially, the surgeon conduct the endoscopic visualization to the(Initial endoscopic visualization is conducted by the surgeon to body´s wall, with endoscopic partial(and direct view) bone resection, using an Endoscopic Drill System. So, a new guidewire is then inserted through the working channel of the endoscope, being positioned (A new positioning is made with a guide wire through the working channel near the bullet, inside at anterior portion of the body. The endoscope is then withdrawn, with the certainty that no neural structure is interposed or close to the working cannula, and successive tubular dilators are passed over the guide wire, in a total of 04 (four), (as four new dilators pass over this guide wire after removal of the endoscope and make sure no neural structure is interposed) with the latter having a working channel of 15.0 mm (inner diameter). (It"snt possible to change, because It's the technique"s name.) Now, this will enable releasing the bullet, inside the vertebra, with a probe, beyond the use of(with the use) the drill), that will allow reaming the vertebral body space, and releasing the bullet, under fluoroscopic and endoscopic guidance, under direct visualization of neural structures and(...with complete visualization of neural structures through the use of radisocopy and endoscopy provide us a space, with safer and simple surgical procedures and facilitating the surgical procedure [3-5].

The next step is use, simultaneously, the endoscopic and fluoroscopic visualizations to do the bullet´s rotate and bite Its flap, by a grasper, to grab and remove it.

After this, two PEEK somatic CAGEs (10 mm of height) It"snt possible to change, because It"s the technique"s name.) are inserted, without risk to the neural structures. The CAGEs are placed(, placing CAGES without risk to neural structures with 20 grams of heterologous bone graft (hydroxyapatite) under fluoroscopic and endoscopic guidance, positioned parallel and in the anterior third of the somatic space, to better mechanical

support(... for better vertebral support, we seek to place the CAGEs anteriorly, through the use of radioscopy and endoscopy. So, the surgical implants will be the L3 reconstruction, filling the vertebral hollow. After that, the endoscope is reintroduced through the 15mm cannula for direct final visualization of the CAGES and bone visualization of the bone graft and CAGEs is provided at the end with the reintroduction of the endoscope using the 15mm cannula in the somatic space [6-8].

The spinal fixation is followed by the use of a (Subsequently, stabilization is done through the use of a percutaneous pedicular screw system. This appropriately sized 6mm or 7mm diameter pedicle screws are then inserted and bilateral connecting rods were passed, following final tightening of the set screws, the rod and screw extenders were removed (The use of subfascial dowels allows the introduction of screws and rods of adequate size for the patient's body, with fixation and tightening, followed by removal of the system.). After all instruments are removed, direct closure of the skin is done. No drainage was required. The patient was discharged after 2 days the skin is sutured in sequence, with the patient being released in two days, without draining [9,10].

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