

Multimodal treatment of the FBSS

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Post-discectomy syndrome is a very common problem, which affects a relevant percentage of patients.

The cause is the fibrotic process which follows surgery, since scarring will:

- hinder mobility inside the canal of the dural sheet, fixing it to the surrounding ligaments and bone
- maintain a compressive action on the nervous structures
- maintain a compressive action on the vascularization of the nerves and on CSF circulation.

Furthermore the neuroanatomical basis of discogenic pain can be summarised as follows:

1. The intervertebral disc receives an extensive innervation, especially the annulus fibrosus.
2. Nerve extension was found into the nucleus pulposus of the degenerated disc.
3. The sinuvertebral nerve plexuses facilitate a polysegmental signal and pain spreading.
4. The innervation of the intervertebral disc is very high connected with the paravertebral muscles.
5. A local denervation of the paravertebral muscles was found in post-discectomy syndrome.

Given all these complex and interconnected factors, we have conceived a multimodal treatment which is composed of paravertebral injections, episacral injections, endoscopic neurolysis and intradiscal ozone injection.

Paravertebral injections of oxygen-ozone are mixed to injections of troxerutine and carbazocrome, vasoactive drugs which will improve nourishment to the nervous structures.

The combination of these with episacral injections of corticoids, and low dose ozone, has shown good results.

Endoscopic Lumbar Peridurolysis, a minimally invasive approach performed by a flexible fiberoptic scope, which is 0.9 mm in diameter has been added in severe cases.

Under direct vision, at the level of pathology, a mechanic division of epidural fibrotic tissue is performed and drugs and Ozone can be injected.

The only contraindication to the procedure is Tarlov's cyst, which may be ponctioned, with entrance in the intradural space.

Our series includes 747 patients suffering because of post-discectomy syndrome.

At 12 months control, these are our results in post-discectomy syndrome cases:

very good results in 48.9 %,

good in 21.85 %

insignificant result in 28.80 %.