





DIRECT LATERAL

Interbody Fusion

Transpsoas Approach DLIF Surgical Technique

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Neuromonitoring through the Psoas

Step 1 After a safe retroperitoneal pathway to the psoas has been established, the NIM® X-PAK Probe is guided down to the psoas while using the finger to protect the peritoneal membrane. The NIM® X-PAK Probe includes an electrified handle stylet assembly and an insulated cannula that enables controlled electrification at the tip of the device (Figure 11).

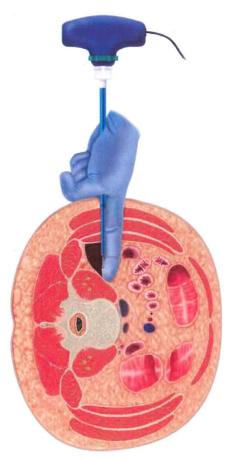


Figure 11

Step 2 A Needle Driver is used to position the NIM® X-PAK Probe onto the top surface of the psoas. The entry point of the NIM® X-PAK Probe into the psoas should be targeted between the anterior half to third of the disc space in order to avoid the nerves of the lumbar plexus and to remain posterior to vascular structures. Cadaver studies have shown that the motor nerves typically reside in the posterior one third of the psoas muscle (Figure 12). Lateral fluoroscopy is used to make adjustments until the NIM® X-PAK Probe is in the proper position (Figure 13).

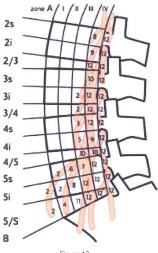


Figure 12



Figure 13