Chronic spinal pain is the greatest overall cause of disability in our society. It can be caused by a number of issues with joints, nerves, muscles, ligaments, and central pain processing, all contributing factors. To maximise therapy outcomes, it’s important to identify contributing factors and target them with appropriate treatments. One factor which may contribute to chronic spinal pain is epidural fibrosis (the formation of scarring near the nerve root). This can impact nerves and obstruct blood flow, thereby causing radicular pattern nerve pain. There are many causes of epidural fibrosis. The most common are post-surgical scarring, and fibrosis following common disc-degeneration events (i.e. tears, extrusions, sequestrations, prolapses). Less common causes include infection, hematoma, or intrathecal contrast material (contrast dyes used in imaging procedures).

**FACT SHEET**

**Racz Catheter Epidural Adhesiolysis**

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**TREATMENT FOR RADICULAR NERVE PAIN**

Epidural steroid injections — (caudal, translaminar, and transforaminal) are common interventional treatments for radicular nerve pain. They can also be tried as a conservative treatment for spinal stenosis (narrowed spinal canal) pain. These injections can be effective by:

- assisting with the removal of stimuli that cause inflammation
- reducing the inflammation response and pain pathways
- reducing nerve swelling.

Although these injections are often beneficial, there are times when they are not. This may be due to:

- The injectate may not always reach the area being targeted
- The injections are unlikely to loosen fibrotic adhesions which may be the main cause of the pain in some cases.

Racz catheter epidural adhesiolysis treatment addresses these two issues. With this procedure a fine, flexible, steerable catheter is placed in to the epidural space and directed under (guided x-ray to the target area. Saline and contrast, and hyaluronidase (a substance to increase the absorption of these ingredients), are injected to facilitate the passage of the catheter and loosen epidural adhesions (scar tissue). Once the desired flow of injectate is seen at the target site, steroid may be injected for additional therapeutic benefit.

Very often, with this technique, initial obstruction to catheter passage and injectate flow is overcome with the procedure and the physician can be more confident that the target area is treated, compared with the simpler epidural techniques. This technique allows targeting of highly pathological sites — such as past surgical levels — which often cannot be accessed with simple epidural techniques.
A Racz catheter is also the preferred technique when targeting specific cervical spine (neck area) epidural sites. The catheter can be introduced safely and easily via the upper thoracic spine and steered upwards towards the head to the desired sites. Simple epidural injection at a cervical level and transfornaminal epidural injection (injection of a long-acting steroid) at cervical levels have a higher risk of complication\(^6\) and offer less flexibility with targeting of injectate.

A number of papers support the use of the Racz catheter epidurolysis/adhesiolysis as a safe technique with improved outcomes compared with simple epidural injection techniques in patients with radicular pain and a history suggesting epidural fibrosis\(^6\)\(^7\)\(^8\).  

REFERENCES