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### Letter to the Editor

**A Safer Technique Utilizing an Intravenous Catheter Introducer for Epidural Catheter Lysis of Adhesions**

**To the Editor:**  
The primary cause of epidural adhesions is scarring in the epidural space following surgical intervention of the spine. Epidural adhesions may involve the nerve roots as they enter the neural foramina. Traction on the swollen, inflamed nerve root may contribute to chronic pain in patients following spinal surgery, e.g., laminectomy. Previously described needle techniques for epidural lysis of adhesions involve placement of a single needle with the injection of local anesthetic, steroids, and possibly hypertonic saline or hyaluronidase (1,2). Catheter techniques involve passage of an epidural catheter into the specific location of the adhesions. The standard approach as described by Racz (3) involves the initial insertion of a 16-gauge epidural needle (preferably an RK needle) into the sacral hiatus. Using fluoroscopic guidance, a stainless steel spiral-tipped Racz Tun-L-Kath epidural catheter (Epimed International Inc, Lubbock, TX) is passed through the needle into the adhesions. Contrast media followed by a local anesthetic-steroid mixture are then injected into the epidural space. This special Racz Tun-L-Kath epidural catheter is used to reduce the incidence of catheter shearing from multiple passes through the epidural needle. However, catheter shearing still occurs, and surgical intervention is sometimes required to remove the sheared catheter (3). We have simplified this technique by substituting the epidural needle with a regular 18-gauge intravenous catheter (Terumo Medical Corporation, Elkton, MD). We insert the 18-gauge intravenous

catheter (with needle stylet) through the sacral hiatus. The intravenous catheter needle is then removed, leaving the plastic catheter in the sacral epidural space. Using fluoroscopic guidance, a regular epidural catheter is then inserted through the plastic intravenous catheter, passed upwards, and then positioned at the desired location. Multiple passes may be performed without increasing the risk of shearing as the epidural catheter glides freely within the plastic intravenous catheter. This technique is simple and appears to minimize the risk of catheter shearing from catheter-plastic interface. The technique will suffice for most patients with epidural adhesions. In those patients with significant scarring, a stainless steel spiral-tipped Racz Tun-L-Kath epidural catheter may be passed through a 16-gauge intravenous catheter (instead of a 16-gauge epidural needle) to minimize the risk of catheter shearing.

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