An 83-year-old female was referred for S1 epidural steroid injection. Although fluoroscopy offers excellent visualization of the sacrum, severe osteoporosis, degenerative changes, sacroplasty, or a recent bowel preparation can compromise this view in some patients. In most patients with normal body habitus, the posterior foramen of the sacrum can be clearly visualized with ultrasound-guidance.

**Introduction**

A 12-5 MHz linear probe was placed on the skin directly over the PSIS. Scanning from lateral to medial in the axial plane, the probe was then slid medially until the S1 foramina were visualized. Ultimately, correct placement was verified by visualizing the L5-sacral junction, and the S1 and S2 foramina, in a sagittal view. After sterile preparation and administration of local anesthesia, a 22-gauge 3-1/2 inch spinal needle was atraumatically advanced under direct visualization in the cephalad to caudal plane until the dorsum of the sacrum was palpated adjacent to the foramina. Then, the needle was advanced 1-1/2 inches into the epidural space. Epidural spread was intermittently confirmed with fluoroscopy intermittently using iohexol (Omnipaque) 300 mg/cc.

**Materials and Methods**

Ultrasound-guided spine transforaminal epidural injections and the accuracy of ultrasound-guided spinal interventions have been previously described in detail. Ultrasound guidance, confirmed fluoroscopically, could be considered an additional imaging modality for accurately locating and advancing into the sacral foramina, while potentially limiting radiation exposure.

**Results**

Our attempt to view the S1 region with the use of ultrasound proved successful. This was verified by intermittently using fluoroscopy during the procedure.

**Conclusions**

Ultrasound-guided spine transforaminal epidural injections and the accuracy of ultrasound-guided spinal interventions have been previously described in detail. Ultrasound guidance, confirmed fluoroscopically, could be considered an additional imaging modality for accurately locating and advancing into the sacral foramina, while potentially limiting radiation exposure.

**References**