An ultrasound-guided lateral approach for proximal sciatic nerve block is performed in patients lying supine, and it can block the posterior femoral cutaneous nerve simultaneously as frequently as does a subgluteal approach.\(^1,2\) With the lateral approach, a convex transducer is first placed immediately below the most prominent part of the greater trochanter, with the patient in the supine position. The transducer is then slightly moved in a posterior direction to identify the ischial tuberosity on the center of the ultrasound apparatus screen. The sciatic nerve is seen just antero-lateral to the long head of the biceps femoris muscle located superficial to the ischial tuberosity. A needle is inserted between the transducer and the greater trochanter, and advanced in plane with the transducer toward the sciatic nerve. When a nerve stimulator is used simultaneously with ultrasound guidance, local anesthetic (approximately 20 mL) is injected after confirmation of electrical simulation on the sciatic nerve, based on observations such as dorsiflexion or plantar flexion of the ankle and toes and twitching of the calf muscles. Contraction of the hamstrings also reflects appropriate positioning of the needle tip, as the sciatic nerve is stimulated at the proximal level with this approach. When only ultrasound guidance is used, spread of local anesthetic in the vicinity of the sciatic nerve, beneath the gluteus maximus muscle, is the cornerstone to a successful block. In addition, multiple injections of local anesthetic while changing the needle tip position to obtain a “doughnut sign” around the sciatic nerve may provide a more rapid onset of the block effects.\(^3\) A potential drawback of this approach, especially when performed on a thin patient, is that space between the greater trochanter and the operation table might be insufficient to place the relatively large convex transducer. Internal rotation of the hip makes this space wider, and facilitates the placement of the transducer. Alternatively, using a mid-size convex transducer, which is smaller than typical transducers and larger than microconvex transducers, can address this problem. As shown in Fig. 1, using a mid-size convex transducer (C35xp; FUJIFILM SonoSite Inc., Tokyo, Japan) in addition to the internal rotation of the hip provides adequate space below the greater trochanter to place the transducer. While a microconvex transducer can be easily placed posterior to the greater trochanter regardless of patient size, my clinical experiences suggest that the stability of the microconvex transducer on the body surface during the block is inferior to that of the mid-size convex transducer. The supplementary ultrasound video shows the procedure of the lateral approach using the mid-size convex transducer.

![Image of the lateral approach to proximal sciatic nerve block](https://via.placeholder.com/150)

**Fig. 1.** The photograph shows the patient position, mid-size convex transducer, and needle position for a left-sided block.
(Suppl Video 1 can be found at https://www.doi.org/10.6859/aja.201903_57(1).0006).

Conflicts of Interest
None.

References