

The large first sacral ventral spinal rami exit the sacral canal through the ventral sacral foramina between the fused first and second sacral vertebrae, where they are connected to adjacent sympathetic ganglia by grey rami communicantes.

Each ventral ramus of S1 lies anterior to the piriformis muscle and posterior to the internal iliac vessels and ureters and divides into a ventral and dorsal branch. The ventral branches join with the ventral branches of the lumbosacral trunks (L4, L5), thereby participating in the formation of the sacral plexus. The lumbosacral trunks then join with the ventral branches of the ventral rami of S2 and S3 to form the tibial component of the sciatic nerves. The dorsal branches join with the dorsal branches of the lumbosacral trunk (L4, L5) and the dorsal branches of the ventral rami of S2 and S3 to form the common peroneal component of the sciatic nerves.

Relations

Between the lumbosacral trunk and the ventral rami of S1 are the superior gluteal vessels. The inferior gluteal vessels pass between either the ventral rami of S1 and S2 or S2 and S3.

Supply

The first sacral ventral spinal rami supply piriformis and the muscles of the buttock and lower limb via the sacral plexus. Cutaneous fibers are also distributed via branches of the sacral plexus.