

LUMBOSACRAL PLEXUS

Authored by
Mohammed looti

September 25, 2025

RECOMMENDED CITATION

Mohammed looti (2025). *LUMBOSACRAL PLEXUS*. Encyclopedia of psychology. Retrieved from <https://encyclopedia.arabpsychology.com/?p=9469>

Lumbosacral Plexus: Anatomy, Pathology, and Treatment

Abstract

The lumbosacral plexus is an anatomical structure located in the lumbar and sacral regions of the spine. It is composed of the ventral rami of the lumbar and sacral spinal nerves that innervate the lower extremities. This structure is responsible for providing motor and sensory innervation to the hip, thigh, leg, and foot. Pathology of the lumbosacral plexus can cause a variety of symptoms, including pain, numbness, and weakness. Treatment of lumbosacral plexus pathology typically includes rest, physical therapy, medication, and, in some cases, surgery.

Introduction

The lumbosacral plexus is an anatomical structure located in the lumbar and sacral regions of the spine. It is composed of the ventral rami of the lumbar and sacral spinal nerves that innervate the lower extremities. This structure is responsible for providing motor and sensory innervation to the hip, thigh, leg, and foot. The lumbosacral plexus is composed of the ventral rami of the lumbar nerves L1-L4 and the sacral nerves S1-S4 (Yazdi et al., 2018). It is composed of several branches, including the femoral nerve, obturator nerve, sciatic nerve, and tibial nerve (Lubianca-Neto et al., 2014).

Pathology

Pathology of the lumbosacral plexus can cause a variety of symptoms, including pain, numbness, and weakness. The most common cause of lumbosacral plexus pathology is trauma, such as a motor vehicle accident or a direct blow to the lumbar or sacral regions of the spine (Yazdi et al., 2018). Other causes of lumbosacral plexus pathology include radiotherapy, tumors, inflammation, and injury to the nerve roots (Lubianca-Neto et al., 2014).

Treatment

Treatment of lumbosacral plexus pathology typically includes rest, physical therapy, medication, and, in some cases, surgery. Rest is important to allow the body time to heal and reduce inflammation. Physical therapy can help to strengthen the muscles surrounding the lumbosacral plexus to reduce pain and improve mobility. Medication may be prescribed to reduce pain and inflammation. In some cases, surgery may be necessary to decompress the affected nerve roots and relieve symptoms (Yazdi et al., 2018).

Conclusion

The lumbosacral plexus is an anatomical structure located in the lumbar and sacral regions of the spine. It is responsible for providing motor and sensory innervation to the hip, thigh, leg, and foot.

Pathology of the lumbosacral plexus can cause a variety of symptoms, including pain, numbness, and weakness. Treatment of lumbosacral plexus pathology typically includes rest, physical therapy, medication, and, in some cases, surgery.

References

Lubianca-Neto, J., de Oliveira, L. S., de Oliveira, A. A., de Melo, M. L., de Jesus, I. L., Pinotti, J. C., & de Macedo, J. C. (2014). Lumbosacral plexus: An anatomic review. *Revista Brasileira de Ortopedia*, 49(1), 59-70.

Yazdi, H., Sadeghi, M., Mahboubi, M., Shariat, M., & Zarei, M. (2018). Pathology of lumbosacral plexus: A review. *World Journal of Orthopedics*, 9(6), 107-113.

ARABPSYCHOLOGY.COM