

Evidence Discussion (PND 5)

- MRI is the imaging study of choice to evaluate the lumbosacral plexus due to superior soft-tissue contrast and good spatial resolution, providing detailed definition of intraneural anatomy as well as localizing pathologic lesions in conditions in which electrodiagnostic and physical findings are nonspecific.¹ Abnormal MRI findings in lumbosacral plexopathies include increased T2 signal intensity, focal or diffuse enhancement, or enlargement or edema of nerve segments. MRI is more sensitive than CT at identifying subtle infiltrative lesions, although CT may be useful to assess for psoas hematoma.²
- Regarding fluorine-18-2-fluoro-2-deoxy-D-glucose (FDG)-PET/CT, there is no relevant literature to support the use of FDG-PET/CT in the evaluation of traumatic or nontraumatic lumbosacral plexopathy in the absence of a known malignancy.¹

References

1. Expert Panel on Neurological and Musculoskeletal Imaging; Boulter DJ, Job J, Shah LM, Wessell DE, Lenchik L, Parsons MS, Agarwal V, Appel M, Burns J, Hutchins TA, Kendi AT, Khan MA, Liebeskind DS, Moritani T, Ortiz AO, Shah VN, Singh S, Than KD, Timpone VM, Beaman FD, Corey AS. ACR Appropriateness Criteria® Plexopathy: 2021 Update. J Am Coll Radiol. 2021 Nov;18(11S):S423-S441. doi: 10.1016/j.jacr.2021.08.014. PMID: 34794598.
2. Rubin DI. Brachial and lumbosacral plexopathies: A review. Clin Neurophysiol Pract. 2020 Aug 13;5:173-193. doi: 10.1016/j.cnp.2020.07.005. PMID: 32954064; PMCID: PMC7484503.