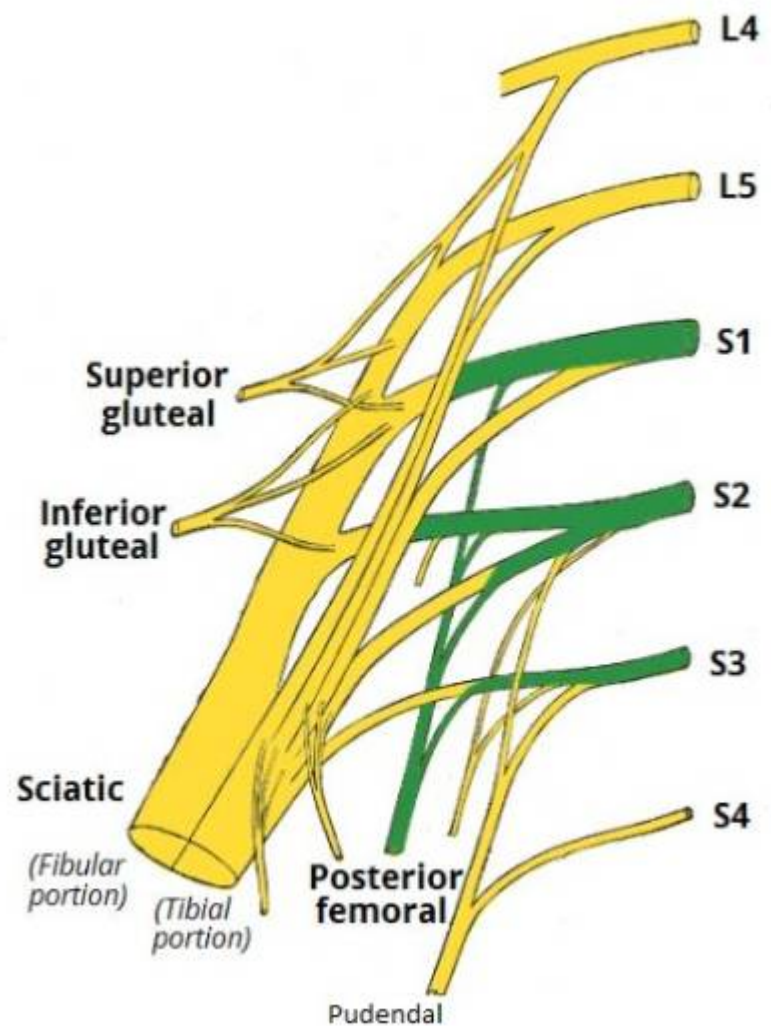


Sacral spinal nerve 3



The [sacral spinal nerve 3](#) (S3) is a [spinal nerve](#) of the sacral segment.

It originates from the [spinal column](#) from below the 3rd body of the [sacrum](#).

S3 supplies many [muscles](#), either directly or through nerves originating from S3. They are not innervated with S3 as single origin, but partly by S3 and partly by other spinal nerves. The muscles are:

iliococcygeus

puborectalis

coccygeus

sphincter urethrae membranaceae

superior gemellus

Patients who had preservation of only one S3 nerve root had more severe incontinence (1.99 ± 0.79)

versus 2.60 ± 0.63 , $p = 0.01$) and more sensory loss (1.88 ± 0.82 versus 2.31 ± 0.59 , $p = 0.02$) than those patients with preservation of bilateral S3 nerve roots ¹⁾.

Laparoscopic implantation of [neuromodulation electrodes](#) allows simultaneous stimulation of S3 and [pudendal nerves](#), providing more programming options and possibly increasing success rates in complex pelvic floor dysfunction cases ²⁾.

¹⁾

Ji T, Guo W, Yang R, Tang X, Wang Y, Huang L. What Are the Conditional Survival and Functional Outcomes After Surgical Treatment of 115 Patients With Sacral Chordoma? Clin Orthop Relat Res. 2017 Mar;475(3):620-630. doi: 10.1007/s11999-016-4773-8. PubMed PMID: 26975382; PubMed Central PMCID: PMC5289164.

²⁾

Li ALK, Marques R, Oliveira A, Veloso L, Girão MJBC, Lemos N. Laparoscopic implantation of electrodes for bilateral neuromodulation of the pudendal nerves and S3 nerve roots for treating pelvic pain and voiding dysfunction. Int Urogynecol J. 2017 Jul 15. doi: 10.1007/s00192-017-3411-7. [Epub ahead of print] PubMed PMID: 28712018.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=sacral_spinal_nerve_3

Last update: **2024/06/07 02:53**

