The pudendal nerve originates in the sacral plexus; it derives its fibers from the ventral ramus of the second, third, and fourth sacral nerves (S2, S3, S4). It innervates the external genitalia of both sexes, as well as sphincters for the bladder and the rectum. It passes between the perineum and the ischium, and then travels through the levator ani muscle to become the sciatic nerve. It provides sensory innervation to the skin, muscles, and glands of the perineal region.

The pudendal nerve enters the pelvis through the lesser sciatic notch. It accompanies the internal iliac vessels and nerve, and enters the pelvis through the sacrospinous ligament (SSL). From an internal approach to the sacrospinous ligament, using 5 mm scissors, the pudendal nerve is then exposed by dividing the sacrotuberous ligament. This allows access to the pudendal canal. The pudendal nerve is then dissected from the arcus tendineus fascia pelvis (ATFP) and the arcus tendineus fascia pelvis is retracted medially to allow visualisation of the pudendal nerve and its branches.

Laparoscopic pudendal nerve decompression (LPND) is an innovative surgical technique for the treatment of pelvic nerve entrapment syndromes. It is particularly useful for cases where the nerve is compressed or entrapped by extrapelvic structures, such as bony prominences or fibrous bands.

**References**

5. Possover M, Loukas M, Tubbs RJ et al. Lower 1/3 of the vagina, and labia. In men, this includes the penis and scrotum. Often pain is referred to nearby areas in the pelvis. For example, competitive cyclists (who sometimes refer to it as “cyclist’s syndrome”) can in rare cases develop recurrent numbness of the penis and scrotum after prolonged cycling or intense and sustained ejaculation, with disturbance of urination and reduced awareness of defecation. The symptoms can start suddenly or develop slowly over time. Typically pain gets worse as the day progresses and is worse with sitting. Without treatment, over time there may be a progressive worsening of symptoms starting with a small amount of discomfort that develops into a chronic and constant state of pain that does not decrease even when standing or lying down.

Possible symptoms:
- Pain after orgasm
- Loss of sensation with difficulty achieving orgasm
- Strange feeling of uncomfortable arousal without sexual desire
- Intolerance to tight pants or elastic bands around the leg.

Friction and feeling of inflammation along the leg. Pain after bowel movement. Sometimes sufferers also report pain prior to and during the bowel movement.

Laparoscopic pudendal nerve decompression Surgical treatment of PNE can be performed with different approaches like transgluteal, transperineal and transrectal/perianal. Pudendal nerve decompression implied by a limited access to the pelvic nerves and muscles, can now be overcome with the availability of endoscopic video equipment and microsurgical instruments enabling a unique visibility with high definition and magnification (5x) of the structures and the possibility to work with appropriate instruments.

Laparoscopic surgery of the pudendal nerve is a minimally invasive technique that allows for anatomic visualization of the pudendal nerve and its branches. The procedure is performed under general anesthesia through a small incision in the lower abdomen. The laparoscope is inserted into the abdomen and the surgical field is visualized. Using laparoscopic instruments, the pudendal nerve is dissected from surrounding structures and released from any compression or entrapment. The nerve is then carefully inspected and any abnormal swellings or adhesions are removed. The procedure is performed under direct visualization and with the help of specialized instruments.

**References**


**Laparoscopic pudendal nerve decompression**

The treatment of Chronic Pelvic Pain Syndrome due to Pudendal Nerve Entrapment

- **Pudendal Nerve Entrapment**
  - The pudendal nerve is a compound sensory and motor nerve that runs through the pelvic cavity and innervates the external genitalia.
  - The nerve divides into two terminal branches: the superior and inferior rectal nerves.
  - These branches give off the pudendal vessels upward and forward along the lesser sciatic foramen. The pudendal nerve accompanies the internal iliac vessels and nerve, and re-enters the pelvis through the sacrospinous ligament (SSL), from an internal approach to the sacrospinous ligament using 5 mm scissors.
  - The pudendal nerve is then exposed by dividing the sacrotuberous ligament. This allows access to the pudendal canal. The pudendal nerve is then dissected from the arcus tendineus fascia pelvis (ATFP) and the arcus tendineus fascia pelvis is retracted medially to allow visualisation of the pudendal nerve and its branches.

- **Symptoms**
  - Pain after bowel movement. Sometimes sufferers also report pain prior to and during the bowel movement.
  - Painful muscles spasm of the pelvic floor after bowel movement.
  - Constipation.
  - Sexual problems.
  - Friction and feeling of inflammation along the leg.
  - Pain after ejaculation.

- **Laparoscopic surgical treatment**
  - Surgical treatment of PNE can be performed with different approaches like transgluteal, transperineal and transrectal/perianal.
  - Pudendal nerve decompression implied by a limited access to the pelvic nerves and muscles, can now be overcome with the availability of endoscopic video equipment and microsurgical instruments enabling a unique visibility with high definition and magnification (5x) of the structures and the possibility to work with appropriate instruments.

- **Laparoscopic pudendal nerve decompression** is the only method which enables us to confirm diagnosis and to treat the patient at the same time. The most frequent etiologies consist of lesions to the nerves, secondary to surgery by cutting, sitting or caotigation of nerves, compression/ irritation of nerves by scar tissue or enlarged vessels (vascular entrapment), compression/infiltration of the nerves by pelvis organs (entangled uterus) or pathologies (lancers, endometrosis).

- **References**