**Abstract**

**Study objective:** To present 10 standardized and reproducible surgical steps allowing for complete excision of deep endometriosis nodules involving the sciatic nerve.

**Design:** Surgical education video. The local institutional review board confirmed that the video met the ethical criteria required for publication. Patient consent was obtained.

**Setting:** Tertiary referral center.

**Interventions:** The excision of deep endometriosis involving the sciatic nerve may be performed following 10 steps: (1) Longitudinal incision of the peritoneum covering the external iliac artery, from the hypogastric vessels to the round ligament and the identification of the genitofemoral nerve. (2) Dissection of the iliolumbar space identified laterally by the psoas muscle and medially by the external iliac artery and vein [1-5]. (3) Identification of the obturator nerve. The dissection is performed on contact with the psoas muscle; when the nerve is surrounded by the nodule, its releasing is progressively carried out. (4) Identification of the obturator vessels, which cross the obturator nerve beneath and follow a lateral direction. (5) Opening of the lumbosacral space, below the level of the obturator nerve, and the identification of the sciatic nerve, resulting from the confluence of L4 to S3 roots. During this step, the deep endometriosis nodule is identified on contact with the greater sciatic foramen. (6) Opening of the broad ligament, between the external iliac vessels and the umbilical artery, and identification of the obturator nerve, as it is usually performed in pelvic lymphadenectomy. The surgeon may either perform a separate incision of the posterior leaf of the broad ligament and medial to the infundibulo-pelvic ligament or prolong medially the incision made at step 1. (7) Identification of the sciatic nerve, which is seen below and medially from the obturator nerve and obturator vessels. During this step, the posterior limit of the nodule is identified. (8) Identification of sacral roots S1, S2, and S3 [6]. The pudendal nerve and the posterior femoral cutaneous nerve may be identified below the S3 and medially from the sciatic nerve and before their exit through the greater sciatic foramen. The posterior and medial limit of the nodule is progressively released [7]. (9) The dissection is continued laterally, on contact with the ischium, down to the ischial spine and the coccygeus muscle. The lateral limit of the nodule is identified and released. (10) The anterior limit of the nodule is identified and, when required, is separated from the bladder. The latter 3 steps are less standardized, and the surgeon may alternate lateral, medial, posterior, and anterior dissection of the nodule, depending on the intraoperative circumstances. In most cases, the nerves are compressed but not infiltrated inside the epineurium, and their complete releasing is followed by significant or complete relief of pain and motor problems [6]. When the nodule infiltrates the nerves inside the epineurium, the excision may be performed into the nerve.

**Conclusion:** Laparoscopic excision of deep endometriosis nodules involving the sciatic nerve is a challenging procedure, requiring good anatomic knowledge, surgical skills, preliminary specific training, and multidisciplinary postoperative care. Teaching such a complex procedure is a mandatory but delicate task. By following 10 sequential steps, the surgeon may reduce the risk of hemorrhage originating from the external iliac, obturator, and pudendal vessels; preserve somatic nerves; and successfully excise deep endometriosis nodules. Although the 10 steps attempt to standardize the surgical approach in a challenging localization of deep endometriosis, they are not mandatory and should be adapted to the patient.