

Submission categories (A. Oral/ B. E-poster/ C. Video/ D. YAG video)	D. YAG video
Title of Abstract	Laparoscopic nerve-sparing radical parametrectomy for deep lateral parametrial endometriosis (LPE)
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Aims and objectives	To demonstrate anatomical and technical highlights of nerve-sparing radical parametrectomy for LPE.
Settings and Design	An urban general hospital. LPE may involve the ureter, internal iliac vessels, inferior hypogastric plexus, pelvic splanchnic nerves, and sometimes sacral nerve roots. Although LPE is not overly rare, isolation of the autonomic nerves from LPE cannot always be guaranteed. In cases where endometriosis lesions are embedded in the deep parametrium, nerve-sparing techniques are no longer considered feasible, except in cases with unilateral involvement. However, even one-sided radical parametrectomy may actually lead to pelvic organ dysfunctions, which seriously affects quality of life.
Materials, setting and methods	A 38-year-old woman, para 1, presented with a five-year history of severe chronic pelvic and gluteal pain, all of which were resistant to pharmacotherapy. MRI revealed right ovarian endometrioma with LPE reaching the lateral pelvic wall. We planned laparoscopic nerve-sparing excision of LPE and decompression of somatic nerves with right salpingo-oophorectomy. The procedure was performed using 8 steps, as follows: Step 1, adhesiolysis and adnexal surgery; Step 2, complete ureterolysis; Step 3, identification and dissection of the hypogastric nerve and inferior hypogastric plexus with development of the pararectal space; Step 4, dissection of the internal iliac vessels; Step 5, identification and dissection of the sacral roots S2-S4 and pelvic splanchnic nerves; Step 6, complete removal of LPE; Step 7, hemostasis and assessment of tissue perfusion using ICG; and Step 8, application of barrier agents to prevent adhesion.
Results	We achieved total removal of LPE with complete sparing of pelvic autonomic nerves, decompression of somatic nerves and preservation of all branches of the internal iliac vessels. Tissue perfusion using ICG was assessed as very good. The patient developed no perioperative complications, including postoperative bladder, rectal or sexual dysfunctions. Pain was completely resolved after surgery. Meticulous dissection based on sufficient anatomical knowledge of the pelvic nerve system allows the development of nerve-sparing techniques during pelvic surgery, decreasing postoperative morbidity. In addition, our step-by-step technique help in performing each part of the surgery in a logical sequence, making the procedure easier and safer to complete.
Conclusion	Laparoscopic nerve-sparing radical parametrectomy is technically feasible for selected patients with LPE. Suitably tailored treatment should be provided for each individual, based on both the latest scientific evidence and life planning for the patient.
Keywords	Lateral parametrial endometriosis, Nerve-sparing surgery, Radical parametrectomy

