Laparoscopic Retroperitoneal Adrenal Adenectomy

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Abstract

Introduction: Nowadays, the laparoscopic approach is the gold-standard technique for the treatment of benign adrenal masses, and can be performed both transabdominally or retroperitoneally.^{1,2} Although the retroperitoneal approach is not as widespread as the transabdominal approach, recent

data suggest that the retroperitoneal approach might present with less paralytic ileus, less postoperative pain, lower postoperative morbidity, a faster recovery, and a lower hospital cost.³

Materials and Methods: We present the clinical case of a 44-year-old woman with a clinical history of a total left adrenalectomy 7 years ago caused by primary hyperaldosteronism. Currently, she presents with a right aldosterone-producing 3 cm adenoma placed in the posterior adrenal horn. A laparoscopic retroperitoneal approach is proposed to perform the adenomectomy preserving the adrenal vascularization and the healthy adrenal parenchyma to avoid surgical adrenal insufficiency.

Results: This video shows step by step the retroperitoneal laparoscopic technique for the surgical treatment of a right adrenal posterior adenoma. Retroperitoneoscopic surgery is an excellent approach that avoids unnecessary entry to the peritoneal cavity, providing a direct posterior access to the adrenal gland that may allow a complete adenomectomy with the total preservation of the adrenal vascularization and subsequently of the healthy adrenal parenchyma. The learning curve can be shortened by adequate training and a rigorous knowledge of the retroperitoneal anatomy.⁴

Conclusions: The surgeon has to be able to adapt to the best surgical approach to each clinical case. In the case presented, the retroperitoneal laparoscopic approach offers a direct access to the adrenal adenoma, allowing its total excision while preserving the vascularization and the healthy adrenal parenchyma. In addition, this approach is less invasive than the transabdominal approach, presenting less postoperative morbidity, a faster recovery, and lower hospital costs.

Patient Consent Statement: The authors state that all the material recorded and distributed has been carefully anonymized to preserve patient privacy. Following the Health care Ethics and Patient Safety Committee Policy of the Clinic Hospital of Barcelona, all patients are fully informed and a Standardized Informed Consent is obtained to register, process, and distribute their clinical information with education and research purposes. The authors state that this patient has been informed and has given consent to the distribution of all the material and clinical information that this video contains.

No competing financial interests exist.

Authors have received and archived patient consent for video recording/publication in advance of video recording of procedure.

Runtime of video: 7 mins 1 sec

Keywords: retroperitoneal, hyperaldosteronism, adrenal adenoma, laparoscopy, partial adrenalectomy, aldosteronoma,

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