



Commentary

Transumbilical single-access laparoscopic left adrenalectomy for giant malignant pheochromocytoma



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ARTICLE INFO

Article history:

Accepted 12 November 2014

Keywords:

Giant adrenal gland
Malignant pheochromocytoma
Laparoscopy
Single-incision

Background

Malignant adrenal gland pheochromocytoma is a rare disorder and frequently the malignancy is only confirmed by pathology after surgery [1,2]. Recently, single-access laparoscopy (SAL) has been reported for adrenalectomy, and its feasibility regards overall patients with BMI <30 kg/m², height <1.75 m, and distance between the umbilicus and 12th rib <25 cm.

Video

A 17-year-old woman was admitted to the hospital for severe headaches, palpitations, tachycardia along with tremulousness, dizziness, and vomiting. Preoperative work-up showed a symptomatic left-side single location adrenal pheochromocytoma. A transumbilical SAL left adrenalectomy was proposed, with the patient in a semi-lateral right-sided decubitus. The technique was performed using an 11-mm reusable trocar to accommodate a 10-mm, 30° rigid and regular length scope besides curved reusable instruments (Fig. 1a). The procedure started with the opening of the splenic ligament and, after have mobilized the splenopancreatic block medially, the adrenal lesion was put in evidence (Fig. 1b).

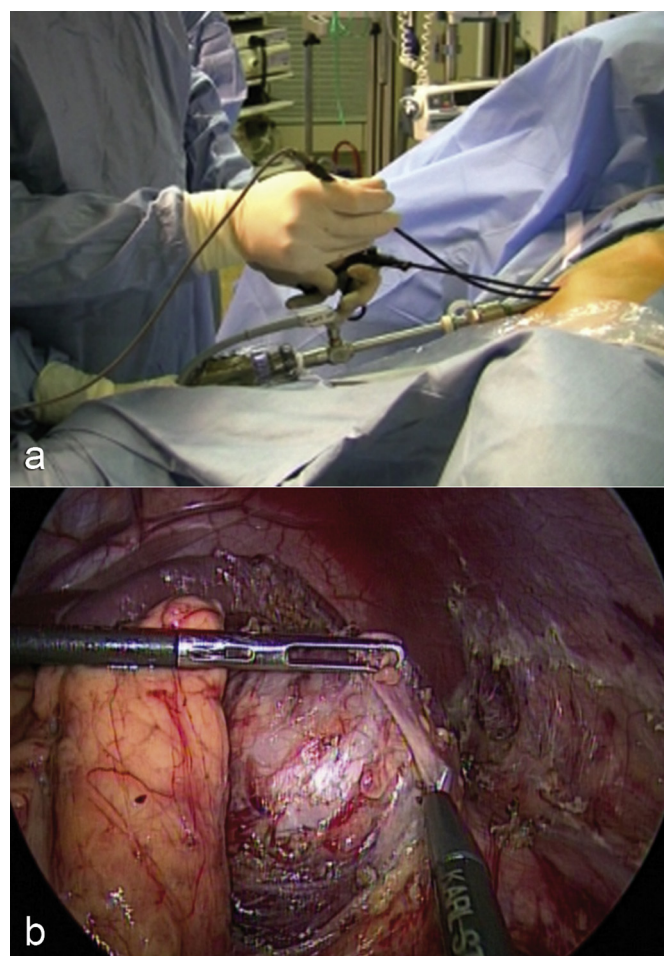


Figure 1. Transumbilical single-access using curved reusable instruments according to DAPRI (Karl Storz-Endoskope), allowing to work with extracorporeal (a) and intra-corporeal (b) triangulation.

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Probably due to the size of the lesion and compression, only two main adrenal vessels were found: vein and mid-artery. Both vessels were dissected and divided between 5-mm non-absorbable clips. The specimen was retrieved transumbilically in a custom-made plastic bag.

Supplementary video can be found online at <http://dx.doi.org/10.1016/j.suronc.2014.11.004>.

Results

Laparoscopic time was 129 min, estimated blood loss 20 cc, and the final scar length measured 16-mm. The symptomatic status of the patient was resolved immediately. The patient was discharged from the intensive care after 3 days and from the hospital after 6 days. Pathologic report showed a malignant pheochromocytoma. Postoperative follow-up at 6 and 15 months was negative for recurrence and the patient remains asymptomatic [3,4].

Conclusions

Transumbilical SAL left adrenalectomy for giant malignant pheochromocytoma is feasible. In young and thin ladies, it

offers an excellent cosmetic result, avoiding large abdominal trauma.

Conflict of interest statement

G. Dapri is consultant for Karl Storz-Endoskope, Tuttlingen, Germany. The other authors have no conflicts of interest or financial ties to disclosure.

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