Laparoscopic retroperitoneal adrenalectomy-clinical experiene of consecutive 120 cases

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摘要

Abstract

OBJECTIVE: Surgical parameters of laparoscopic retroperitoneal adrenalectomy (LRA) for the treatment of benign adrenal tumours were analysed to report the clinical outcomes and technical guidelines for this operation. METHODS: Operative data from 120 consecutive patients who underwent LRA performed by a single surgeon were reviewed. Patients were categorized into one of four stages according to the major technical modifications made during the development of this procedure: needle insufflation, kidney localization, instrument refinement, and the final stage of finger dissection. The surgical parameters of different stages were evaluated, including operation time, operative blood loss, adenoma size, pathology, surgical complications, morbidity, and postoperative recovery. RESULTS: LRA was an evolving technique; operation time and conversion rate decreased gradually as the technique evolved over the years. Operation time was reduced particularly when finger dissection was used to develop the operative working space. Operation time reached a nadir of 80 minutes for patients with left adrenal aldosteronoma after 40 such cases. The overall conversion rate, regardless of the nature of the tumour, was 5%; phaeochromocytoma had the highest conversion rate (43%). A higher conversion rate and longer operation time were noted in patients with Cushing's adenoma or phaeochromocytoma compared to patients with aldosteronoma. CONCLUSION: LRA proved to be a safe and effective treatment for benign adrenal tumours, with few open conversions except for phaeochromocytomas. Finger-assisted dissection for space development was the major factor leading to shortened operation times.