

Laparoendoscopic single-site nephroureterectomy for upper urinary tract urothelial carcinoma:
Outcomes of an international multi-institutional study of 101 patients

Original

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Karakiewicz nomograms in predicting CSS. It is a retrospective study involving >3000 patients from multiple European and US centres between 1992 and 2010. They include high-, mid- and low-volume institutes, as well as different populations. This helps to provide a heterogenous study cohort to better reflect the real clinical situation and hence to improve the reproducibility of the nomogram. The preoperative and postoperative models have a good predictive ability with a stratified C-index of 0.784 and 0.842, respectively, and the latter discriminates substantially better. The authors conclude that the Karakiewicz nomograms proved to have excellent accuracy and generalizability.

With more RCC therapeutic options including surveillance, ablation, surgery and systemic therapies, better prediction tools are needed to help clinical decision-making. A wealth of literature now supports the hypothesis that nomograms and artificial neural networks are superior to classic TNM staging systems in risk assessment; therefore, these predictive tools are important to guide the counselling, treatment and follow-up of patients with RCC.

Conflict of Interest

None declared.

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References

- 1 Kattan MW, Reuter V, Motzer RJ et al. A postoperative prognostic nomogram for renal cell carcinoma. *J Urol* 2001; 166: 63–7
- 2 Frank I, Blute ML, Cheville JC et al. An outcome prediction model for patients with clear cell renal cell carcinoma treated with radical nephrectomy based on tumor stage, size, grade and necrosis: the sign score. *J Urol* 2002; 168: 2395–400
- 3 Karakiewicz PI, Briganti A, Chun FK et al. Multi-institutional validation of a new renal cancer-specific survival nomogram. *J Clin Oncol* 2007; 25: 1316–22
- 4 Tan MH, Li H, Choong CV et al. The Karakiewicz nomogram is the most useful clinical predictor for survival outcomes in patients with localized renal cell carcinoma. *Cancer* 2011; 117: 5314–24
- 5 Cindolo L, Chiodini P, Gall C et al. Validation by calibration of the UCLA integrated staging system prognostic model for nonmetastatic renal cell carcinoma after nephrectomy. *Cancer* 2008; 113: 65–71

Laparoendoscopic single-site nephroureterectomy for upper urinary tract urothelial carcinoma: outcomes of an international multi-institutional study of 101 patients

In this international multi-institutional study, Park et al. [1] have retrospectively collected and analysed data about 101 patients who underwent laparoendoscopic single-site (LESS) nephroureterectomy (NU) for upper urinary tract (UUT) urothelial carcinoma.

Nowadays, NU represents the standard of care for the surgical treatment of UUT urothelial carcinoma in the

majority of patients [2]. Outcomes of such an intervention are strongly improved when lymph node dissection (LND) is performed according to a well-defined template [3].

In recent years, laparoscopy has become an important new approach to reduce the invasiveness of the surgical treatment of UUT urothelial carcinoma. In a multicentre Italian study Porpiglia et. al [4] showed that laparoscopic

NU with open ureterectomy was a feasible and safe technique. Oncological results seemed to be similar to those of the traditional open approach, but the laparoscopic approach still has some disadvantages. First, patients who undergo a laparoscopic procedure receive LND with lower frequency. Moreover, the template during a laparoscopic procedure is rarely respected and the number of lymph nodes removed is often suboptimal [3]. Second, there is no consensus in the literature about the pathological stages that could potentially benefit from the bladder-cuff excision step of this procedure [5]. Bladder-cuff excision omission does not seem to undermine survival in patients with low-stage (pT1-2) disease, nevertheless confirmatory recurrence data are required before a NU without bladder-cuff excision may be considered as an option for this patient category.

The present paper shows that advances in surgical technology are being made, but it also underlines the fact that the above-mentioned disadvantages of NU are still under discussion, and these disadvantages are expanded when introducing a newer and challenging technique such as the LESS approach.

In the present study, different devices and instruments were used. Furthermore, the rate of LND reported was very low (27%), as the number of lymph nodes removed (approximately five). LND was often 'formally' performed, and no specific template was reported to be used. Bladder-cuff excision was not performed in 20% of cases and, when performed, the technique used was not clearly defined. With regard to oncological efficacy, the recurrence rate of 22% at 11 months is not sufficient to clarify if the LESS approach is oncologically effective [6].

In summary, there are evident limitations to the present paper; some are methodological, such as its retrospective nature and the non-homogeneous datasheets used to collect data, and some are technical and oncological. These limitations are justified by the fact that the technique is in its embryonic stages. Nevertheless, the authors deserve praise for having collected such a large number of cases for their study on LESS NU. Their paper underlines the fact that this technique is feasible and safe, and each surgeon who contributed by insisting on such a challenging and novel approach to NU should be congratulated for their efforts.

Now that the feasibility of the LESS NU technique has been demonstrated, the authors have the task of clarifying whether introducing a LESS approach would or would not compromise oncological outcomes. In any case, it is recommended that surgical oncological principles be respected when a new technique is introduced, especially when dealing with a high-risk cell-seeding tumour such as urothelial carcinoma.

Conflict of Interest

None declared.

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References

- 1 Park SY, Rha KH, Autorino R et al. Laparoendoscopic single-site nephroureterectomy for upper urinary tract urothelial carcinoma: outcomes of an international multi-institutional study of 101 patients. *BJU Int* 2013; 112: 610–5
- 2 Rouprêt M, Zigeuner R, Palou J et al. European guidelines for the diagnosis and management of upper urinary tract urothelial cell carcinomas: 2011 update. *Eur Urol* 2011; 59: 584–94
- 3 Roscigno M, Brausi M, Heidenreich A et al. Lymphadenectomy at the time of nephroureterectomy for upper tract urothelial cancer. *Eur Urol* 2011; 60: 776–83
- 4 Porpiglia F, Celia A, Luciani L, Terrone C, Guazzoni G, Parma P. Laparoscopic radical nephroureterectomy: results of a multicentric italian study. *J Endourol* 2009; 23 (Suppl. 1): A109
- 5 Lughezzani G, Sun M, Perrotte P et al. Should bladder cuff excision remain the standard of care at nephroureterectomy in patients with urothelial carcinoma of the renal pelvis? A population-based study. *Eur Urol* 2010; 57: 956–62
- 6 Walton TJ, Novara G, Matsumoto K et al. Oncological outcomes after laparoscopic and open radical nephroureterectomy: results from an international cohort. *BJU Int* 2010; 108: 406–12