The question of optimal management of patients who fail BCG is difficult. An accurate and adequate reassessment with repeat transurethral resection is important, especially for patients with T1 disease. The studies assessing further intravesical therapy with either more BCG or a chemotherapeutic agent are difficult to compare because of differences in regimens used, different baseline characteristics of patients (different stages, concomitant carcinoma in situ, lymph vessel invasion), and varying follow-up periods. Urologists need more drugs in their armamentarium to treat patients with recurrences, especially those who are not candidates for cystectomy. Valrubicin offers one potential additional drug, but complete response in patients with BCG failure was only seen in 21% of patients [3]. GEM had a reasonable response in this study considering the fact that most patients failed at least one cycle of BCG, but it is not clear how many had prior maintenance and a repeat attempt at BCG therapy. The key and currently unanswered question is which patient is best served by an early cystectomy. A prognostic marker that will either predict response to BCG or a high likelihood of progression is needed to optimize patient care. At this time, there is always a danger that cystectomy will be performed too late with resultant worse outcomes [4,5].

Conflicts of interest: The author has nothing to disclose.

#### References

[1] Sylvester RJ, Brausi MA, Kirkels WJ, et al., EORTC Genito-Urinary Tract Cancer Group. Long-term efficacy results of EORTC Genito-

## Re: Laparoscopic Versus Open Nephroureterectomy: Perioperative and Oncologic Outcomes From a Randomised Prospective Study

Simone G, Papalia R, Guaglianone S, et al.

Eur Urol 2009;56:520-6

#### **Experts' summary:**

The authors reported their perioperative and oncologic results from a prospective randomised study following purely laparoscopic nephroureterectomy (LNU; group B) and open nephroureterectomy (ONU; group A) in 80 patients affected by nonmetastatic urothelial cancer of the upper urinary tract. After performing a standard transperitoneal laparoscopic nephrectomy, the ureter is dissected to the ureterovesical junction, and a bladder cuff is excised using a 10-mm LigaSure Atlas hand-switching instrument (Covidien, Boulder, CO, USA).

At a median follow-up of 44 mo, 12 cancer-related deaths occurred (4 in group A and 8 in group B). The 5-yr cancer-specific survival rate of group B (79.8%) was lower than that of group A (89.9%), although this difference was not statistically significant.

The 5-yr metastasis-free survival of group B (72.5%) also was lower than that of group A (77.4%), but this difference was not statistically significant. The bladder tumour–free survival rates of the two groups were similar: Subsequent

Urinary Group randomized phase 3 study 30911 comparing intravesical instillations of epirubicin, bacillus Calmette-Guérin, and bacillus Calmette-Guérin plus isoniazid in patients with intermediate- and high-risk stage Ta T1 urothelial carcinoma of the bladder. Eur Urol 2010;57:766–73.

- [2] Järvinen R, Kaasinen E, Sankila A, Rintala E, FinnBladder Group. Longterm efficacy of maintenance bacillus Calmette-Guérin versus maintenance mitomycin C instillation therapy in frequently recurrent TaT1 tumours without carcinoma in situ: a subgroup analysis of the prospective, randomised FinnBladder I study with a 20-year followup. Eur Urol 2009;56:260–5.
- [3] Steinberg G, Bahnson R, Brosman S, Middleton R, Wajsman Z, Wehle M. Efficacy and safety of valrubicin for the treatment of bacillus Calmette-Guerin refractory carcinoma in situ of the bladder. The Valrubicin Study Group. J Urol 2000;163:761–7.
- [4] Chang SS, Hassan JM, Cookson MS, Wells N, Smith Jr JA. Delaying radical cystectomy for muscle invasive bladder cancer results in worse pathological stage. J Urol 2003;170(4 Pt 1):1085–7.
- [5] Raj GV, Herr H, Serio AM, et al. Treatment paradigm shift may improve survival of patients with high risk superficial bladder cancer. J Urol 2007;177:1283–6, discussion 1286.

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bladder tumour occurred in 9 patients from group A and in 10 patients from group B. Neither metastasis nor cancerrelated death was observed.

The authors concluded that LNU proved to be superior to ONU in terms of perioperative outcome, thanks to the advantages of minimal invasiveness and oncologic outcomes that were comparable to ONU in patients with organconfined disease.

#### **Experts' comments:**

Transitional cell carcinoma (TCC) of the upper urinary tract is relatively uncommon, accounting for 2-10% of all urothelial tumours and, unlike prostate and renal cell carcinomas, is unique because its cells may be shed via urine and become implanted in a raw wound. About 30% of these patients have tumours invading the musculature of the renal pelvis or the ureter, and an additional 30% have involvement of peripelvic or periureteral soft tissue, renal parenchyma, or regional lymph nodes at the time of initial diagnosis. The standard treatment for infiltrative TCC of the upper urinary tract consists of two different procedures: nephrectomy and removal of the lower end ureter with bladder cuff. The safety and efficacy of laparoscopy for upper urinary tract urothelial cancer have been discussed for many years, particularly with regard to oncologic outcome and the rate of tumour seeding. Discussion has focused on whether laparoscopy is associated with a higher risk of peritoneal dissemination and port-site metastases, the incidence of which is declining due to improvements in surgical technique [1].

The resection of the distal ureter with bladder cuff performed with a laparoscopic LigaSure system has been demonstrated to be safe with excellent oncologic results in two other studies [2,3].

The advantages of the LigaSure system are the absence of postoperative haemorrhages, lymphatic leakage, or lymphoceles. Moreover, no stones, which can be associated with a laparoscopic stapler, are described. With this technique it is possible to obtain a precise excision of the complete bladder cuff without breach of the urinary system, thus preventing spillage, and enabling the removal of the entire specimen en bloc.

Based on recent studies [2,3], radical LNU can become the new standard of care in surgical therapy for nonadvanced urothelial cancer of the upper urinary tract.

Conflicts of interest: The authors have nothing to disclose.

#### References

- Matin SF, Gill IS. Recurrence and survival following laparoscopic radical nephroureterectomy with various forms of bladder cuff control. J Urol 2005;173:395–400.
- [2] Greco F, Wagner S, Hoda MR, Hamza A, Fornara P. Laparoscopic versus open radical nephroureterectomy for upper urinary tract urothelial cancer: oncologic outcomes and 5-year follow up. BJU Int 2009;104:1274–8.
- [3] Tsivian A, Benjamin S, Sidi AA. A sealed laparoscopic nephroureterectomy: a new technique. Eur Urol 2007;52:1015–9.

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# Re: Comparative Effectiveness of Minimally Invasive Versus Open Radical Prostatectomy

Hu JC, Gu X, Lipsitz SR, Barry MJ, D'Amico AV, Weinberg AC, Keating NL

JAMA 2009;302:1557-64

### **Experts' summary:**

Using US National Cancer Institute Surveillance Epidemiology and End Results (SEER) data, Hu et al examine postoperative complications, functional outcomes in terms of incontinence and erectile dysfunction, and oncologic outcomes of minimally invasive radical prostatectomy (MIRP) and radical retropubic prostatectomy (RRP) from 2003 to 2007. They found that patients undergoing MIRP versus RRP experienced a shorter length of stay (2.0 vs 3.0 d), lower blood transfusion rates (2.7% vs 20.8%), and a lower anastomotic stricture rate (5.8% vs 14.0%). They also noted lower rates of respiratory and miscellaneous complications postoperatively. However, they found a greater proportion of genitourinary (GU) complications with MIRP versus RRP (4.7% vs 2.1%) and an increased risk of incontinence and erectile dysfunction. Using additional therapies as a surrogate marker, there was no apparent difference in oncologic outcomes. Interestingly, the study found that men from higher socioeconomic backgrounds or white and Asian males (compared with black and Hispanic men) were more likely to undergo MIRP.

## **Experts' comments:**

Although titled "minimally invasive versus open prostatectomy," the present paper adds to the growing controversy of robot-assisted laparoscopic prostatectomy (RALP) in urologic practice. It begins by documenting the significant increase in use of MIRP versus RRP over the 4-yr study period (9.2–43.2%). This has occurred despite an absence of randomised prospective data demonstrating superior results with MIRP versus RRP and is due in part to widespread marketing by institutions and manufacturers of the technology and also the public's perception that any new technology is inherently better.

The present study published in *JAMA* is at odds with, and hence provides some balance against, a plethora of studies claiming superiority of RALP over RRP. It concludes that MIRP is associated with more GU complications and poorer functional outcomes. Although SEER data may lack some of the detailed information collected by smaller institutionbased studies, it does offer a large population-based cohort that can be used to study patients over the course of cancer diagnosis, treatment, and follow-up [1]. The present study may represent a more objective view of the outcomes after MIRP relative to the previously available retrospective single-institution studies.

With this in mind, an analysis of 37 comparative studies available in the literature [2] was published in 2009. Although the authors found that MIRP techniques are associated with significantly lower blood loss and transfusion rates versus RRP, the available data are unable to demonstrate that one approach is superior in terms of functional and oncologic outcomes. In one of the few prospective comparative studies, Ficarra et al [3] compared 105 patients who underwent RRP with 103 patients who underwent RALP. They found improved results with RALP versus RRP in terms of continence and erectile function with equivalent oncologic outcomes. Brandina et al [4], in a recent appraisal of the literature, concluded that RALP is at the very least as good as RRP and in some instances superior. However, they made an important point regarding counseling for patients prior to their procedure. Patients who have undergone RRP are more likely to be satisfied with their outcome relative to RALP patients [5]. Appropriate preoperative discussions should negate the effect that advertising may have on a patient's perception of outcome and ultimately the observed increased regrets.