



European Association of Urology



Letter to the Editor

Reply to Lina Matera's Letter to the Editor re: Markus J. Bader, Ronald Sroka, Christian Gratzke, et al. Laser Therapy for Upper Urinary Tract Transitional Cell Carcinoma: Indications and Management. Eur Urol 2009; 56: 65–71

Due to the technical development of endoscopic instruments and the widespread availability of versatile laser systems, the indications for ureteroscopic diagnosis and treatment have been expanded in recent years. Consequently, the aim of our article was to review the physical and technical background of laser light and tissue interaction as well as to focus on the extended indications for laser-related therapy of upper urinary tract (UUT) carcinoma based on the current literature [1].

We very cautiously concluded that in the treatment of high-grade lesions, ureteroscopic therapy is less likely to be curative. In these cases, endoscopic maneuvers may only be palliative. But we did not state that ureteroscopically guided laser ablation generally was considered, in properly selected cases, suboptimal management for the treatment of UUT transitional cell carcinoma (UUTT).

What we know about endoscopic treatment of UUTT today is based on retrospective studies with only small cohorts of patients with heterogeneous characteristics. A nephron-sparing, endoscopic approach based on laser-guided tumor ablation is the most common contemporary, conservative technique [1].

Ureteroscopic treatment can manage UUT high-grade lesions in patients not amenable to open surgical treatment in palliative situations [2,3]. The combination of a variety of ureteroscopes and available laser systems has broadened the indication for this minimally invasive approach to cases with small, solitary, easily accessible lesions of low-grade pathologic stage that can be completely eradicated with ureteroscopic laser treatment. Close surveillance in these patients can result in 78–81% renal salvage with low recurrence rates [3].

The possibility of inadequate staging, risk of local recurrence, and potential for enhanced progression are major drawbacks of the endoscopic laser-assisted techniques.

A number of clinical and pathologic parameters besides tumor stage and grade have been demonstrated to predict clinical responses. These parameters include tumor diameter, metastases, symptoms, multifocality,

and various humeral factors such as elevated serum alkaline phosphatase levels or white blood cell counts. None of these additional parameters, however, have been established yet as standard prognostic indicators [4,5].

Factors that will help to identify patients with ureteral tumors who are at high risk for progression and that will allow for stratification of patients into different risk groups are yet to be established. Thus, adjunctive treatment options such as prognostic models and stratified treatment options are urgently needed [5].

Only multicenter, randomized, prospective studies would provide fair evaluation of the different techniques in the management of UUTT and follow-up modalities. Additionally, new diagnostic modalities such as monitoring of the anti-tumor response in patients undergoing minimal invasive surgery could improve estimation of the individual prognosis.

Conflicts of interest: The authors have nothing to disclose.

References

- [1] Bader MJ, Sroka R, Gratzke C, et al. Laser therapy for upper urinary tract transitional cell carcinoma: indications and management. *Eur Urol* 2009;56:65–71.
- [2] Deligne E, Colombel M, Badet L, et al. Conservative management of upper urinary tract tumors. *Eur Urol* 2002;42:43–8.
- [3] Grasso M. Ureteroscopic management of upper urinary tract urothelial malignancies. *Rev Urol* 2000;2:116–21.
- [4] Lehmann J, Suttman H, Kovač I, et al. Transitional cell carcinoma of the ureter: prognostic factors influencing progression and survival. *Eur Urol* 2007;51:1281–8.
- [5] Zigeuner R, Pummer K. Urothelial carcinoma of the upper urinary tract: surgical approach and prognostic factors. *Eur Urol* 2008;53:720–31.

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