COMMENTARY

Endoscopic biopsy of upper tract tumors: why bother?

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Wason et al present a study incorporating the biopsy of nephroureterectomy specimens *ex vivo* as well as a retrospective comparative clinical study using a variety of devices to biopsy upper tract lesions. The study addresses an important clinical problem, that of obtaining a tissue diagnosis in upper tract urothelial cancer (UTUC). The management and prognosis of UTUC depends most heavily on basic information such as grade and stage, which traditionally required a nephroureterectomy but can be provided by a good quality biopsy.²⁻⁴

The standard management of UTUC (i.e. primary nephroureterectomy) has not been challenged apart from reports of nephron-sparing treatment in selected cases.⁵⁻⁷ Unlike every other urological malignancy, outcomes of UTUC have not improved significantly over the past 25 years, suggesting that management of this neglected disease needs a radical rethink.⁸ Neo-adjuvant chemotherapy has been proposed as a treatment option and does have some justification based on bladder cancer data as well as the fact that cisplatin is not safe for patients with reduced renal function.⁹

The *ex vivo* part of this study showed large differences between the size and diagnostic usefulness of biopsy specimens taken by the two devices for three nephroureterectomy specimens. While this validates the design advantages of the BIGopsy forceps, the *ex vivo* technique the authors describe bears little if any relation to ureteroscopic biopsy in clinical practice. The BIGopsy forceps are stiff and cumbersome and need to be backloaded onto a rigid or flexible ureteroscope then passed through an access sheath, making their use of limited value during standard diagnostic ureteroscopy.

The retrospective clinical study is interesting in that the largest specimens were obtained using either a basket or laser to remove a papillary lesion intact. The BIGopsy device outperformed the Piranha forceps in terms of size and diagnostic accuracy, albeit in a very small group of patients. Its greatest value may lie in its ability to obtain good samples from sessile tumors. This aspect of the manuscript will be of interest to readers, even if it is too small to draw firm conclusions.

The management of UTUC needs to improve and will likely move away from primary extirpative surgery; however, more work is needed to show that a firm diagnosis can be made prior to nephroureterectomy. This study helps us move closer to the goal of establishing ureteroscopic biopsy as a standard step in the management of UTUC.

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