COMMENTARY

Picking your prostates

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• Ikoushy¹ et al. report on a very large series of patients • with benign prostatic hyperplasia (BPH) who were treated exclusively with laser-based procedures between 1998 and 2014. In keeping with an aging population and an increased life expectancy, patients who underwent these procedures over the 16-year study period became older and sicker, and were more likely to have urinary retention or more severe urinary symptoms. Despite this, the considerable experience of this group enabled them to offer these procedures with consistently low perioperative and postoperative morbidity. Given that almost one-third of patients had an indwelling catheter at the time of their procedure, a mean PVR of approximately 250 mL, and that urodynamics were not part of the regular patient evaluation, it is surprising that the rate of postoperative intermittent catheterisation (and presumably urinary retention) was so low (0.5%).

The management algorithm for men with acute urinary retention is well outlined in the Canadian Urological Association (CUA) BPH guidelines, which suggest a trial of void in combination with alpha blockers.² Failing that, the patient may be considered for surgical intervention. However the management of the man with probable chronic urinary retention is not quite as clear. Given the low morbidity (despite increased patient complexity) and excellent results reported by Elkoushy et al, one important question is whether all patients should undergo some form of BPH surgery to maximize their chance at a catheter-free existence.

Published case series of men with chronic urinary retention have not clearly answered this question. Some authors suggest that without evidence of a detrusor contraction during urodynamics, there is little improvement after surgery. Contradictory papers suggest men (especially those under 80 years of age) may recover bladder function after prostatic surgery and that most men with impaired detrusor contractility on urodynamics still benefit from surgery.³

Although urodynamics can help predict a good outcome, they do not definitively rule out benefit; most men without urodynamic obstruction also report benefit from a transurethral resection of the prostate (TURP)⁴ and even men with detrusor underactivity often benefit.⁵ The natural history of a man with chronic urinary retention that is not managed with a catheter is poorly understood; however, it appears that over medium-term followup, the residual urine stays stable in about half of men; about one-third may go on to BPH surgery with generally good results.⁶

Several non-invasive characteristics have been studied in an effort to better predict outcomes after BPH surgery (such as intravesical prostatic protrusion, detrusor wall thickness, and voiding pressure measured using a condom).^{7,8} Future studies into novel markers of bladder injury, such as ultrastructural changes of the detrusor muscle, may help guide the decision to proceed with surgical intervention.⁹

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