

was reduced to 42% at 2 wk, 49% at 6 mo, and 42% at 2 yr. The peak flow rate was improved by 30% at all intervals. No compromise in erectile or ejaculatory function was observed.

Experts' comments:

The procedure tested in this study is new, is minimally invasive, and is based solely on a mechanical compression of prostate lobes, relieving urethral obstruction without any tissue ablation. It seems to be well tolerated, is effective on LUTS, and is even feasible in the office for selected patients. Would it be too good to be true? None of the previous and so-called mini-invasive procedures proposed as alternatives to medical therapy have achieved such results in terms of feasibility and tolerance. Ablative procedures such as transurethral microwave thermotherapy or transurethral needle ablation are no longer considered, as such, and urethral stents have been all but abandoned because of their reported morbidity. This first study on midterm results, together with a recent report focusing on sexual outcomes [1], is encouraging and anticipates nice perspectives. The single-blinded comparative LIFT study, aiming to determine the safety and effectiveness of the procedure versus placebo, has completed its enrolment and is now in the follow-up phase [2]. Further studies will be needed to compare UroLift with medical therapy, to identify

predictive factors of effectiveness, and to better select potential candidates.

Conflicts of interest: The authors have nothing to disclose.

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Re: Development of Bladder Outlet Obstruction After a Single Treatment of Prostate Cancer with High-intensity Focused Ultrasound: Experience with 226 Patients

Netsch C, Pfeiff D, Gross AJ

J Endourol 2010;24:1399–403

Expert's summary:

To investigate the occurrence of bladder outlet obstruction (BOO) after a single treatment of high-intensity focused ultrasound (HIFU), the authors followed 226 patients for 2 yr and observed that BOO developed commonly, particularly affecting the bladder neck. Patients' prostate sizes as assessed by transrectal ultrasound were 9–95 cm³ (median: 29 cm³). The authors also investigated the benefit of pre-HIFU transurethral resection of the prostate (TURP). The median tissue removed by TURP was 23 cm³ (range: 14–68 cm³). The authors concluded that combining HIFU with TURP decreases the post-HIFU urinary retention time; however, the combination could not prevent delayed development of BOO, mainly in the form of bladder neck stenoses in 25.66% of the patients.

Expert's comments:

Minimally invasive treatments (MITs) for organ-confined prostate cancer such as HIFU, brachytherapy, or cryotherapy are attractive alternatives to radical prostatectomy (RP). None is complication free, and the most frequently seen complication is prolonged urinary retention or voiding difficulties [1,2]. MIT usually involves thermal or radioactive damage to tissues, which are left behind; the resulting edema subsides, followed by nature taking care of the dead tissue and reshaping the organ, which is unpredictable.

Centers with much experience with HIFU recommend performing TURP before HIFU to reduce the possibility of

urinary retention or severe voiding difficulties [3,4]. The rationale for performing a pre-HIFU TURP is downsizing of the prostate glands, to remove the endovesical midlobe and to reduce the anterior-posterior diameter for complete treatment of the peripheral zone during a single HIFU session [3] as well as to remove the microcalcifications and microabscesses in the prostate. Despite this approach, the combination of an almost century-old procedure (TURP) with a high-tech procedure (HIFU) could not prevent the unwanted complication of bladder neck stenosis, as observed by the authors (25.66%). This complication rate is very high by any standard.

Downsizing large prostatic volume and removing a midlobe are logical for allowing good access to the entire gland for HIFU. Performing TURP on small glands just to prevent urinary retention adds a surgical procedure for these patients as well as additional significant cost. The issue of cost-effectiveness of a procedure includes not only the direct costs of a surgical procedure but also the cost of working days lost for the patient and treatment of complications. We provide care in an era in which cost containment is taking on more and more importance in health care economics, even for wealthy nations.

When easily insertable and removable temporary prostatic stents are available, it is a bit astonishing that prostatic stents were not combined with any of the MITs for localized prostate cancer. They can be inserted immediately after any MIT procedure.

If the total cost of MIT plus stent is less than or equal to the cost of RP (of any form) and the outcome is not less than eradication of the cancer, this combination is a logical alternative to be proposed to the patient. This approach may allow immediate urination by preventing edema-caused

transient prostatic urethral obstruction in the short term and may act as an intraluminal scaffold in the long term to mechanically prevent obstructive scarring at the prostatic urethra and the bladder neck. Temporary long-term prostatic stents after MIT may also help remodeling of the prostatic urethra during its healing period. The possibility of combining a stent with a MIT for prostate cancer such as HIFU may save a patient from an additional surgical intervention and may even reduce total cost.

Can this combination yield equal or higher complication-free survival rates than RP? Only comparative studies of large groups of patients can provide the answer to this question.

Conflicts of interest: The author has developed several patented and patent pending stents. Currently, he does not have any financial interest, relationship, or financial conflict with any company related to stents.

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Re: Long-term Survival Following Partial vs Radical Nephrectomy Among Older Patients with Early-stage Kidney Cancer

Tan HJ, Norton EC, Ye Z, Hafez KS, Gore JL, Miller DC

JAMA 2012;307:1629–35

Expert's summary:

The study by Tan and colleagues retrospectively evaluates the long-term survival of a large cohort of Medicare beneficiaries who underwent surgical treatment for clinical stage T1a kidney cancer. The study included 1925 patients (27.0%) treated with partial nephrectomy (PN) and 5213 patients (73.0%) treated with radical nephrectomy (RN). Over a median follow-up of 62 mo, 487 patients (25.3%) and 2164 patients (41.5%) died following PN or RN, respectively; however, kidney cancer was rarely the cause of death. Only 37 patients (1.9%) treated with PN and 222 patients (4.3%) treated with RN died of their disease. The authors controlled for confounding variables including age, Charlson Comorbidity Index score, ethnicity, and gender, and an instrumental variable analysis was used to balance measured and unmeasured variables between treatment groups. The authors found that PN improved overall survival, but there was no difference in kidney cancer-specific mortality. The survival advantage was greatest in those patients <75 yr old and those with a Charlson Comorbidity Index score ≥ 1 . Furthermore, treating seven patients with PN rather than RN would avoid one death at 8-yr follow-up. It should be noted that even in recent years (2004–2007), twice as many RN procedures ($n = 2119$) were performed compared with PN ($n = 1114$).

Expert's comments:

Both the American Urological Association and the European Association of Urology recommend that PN be performed in patients with clinical T1a renal masses, with other treatment

options such as RN, ablation, and observation as alternative options [1,2]. The greater loss of nephrons as a consequence of RN increases the risk of chronic kidney disease with resultant increase in cardiovascular disease and overall mortality [3]. The current study by Tan et al highlights what many previous studies in the urologic literature have shown: that nephron-sparing surgery is the preferred approach to small renal masses. The advantage of this study is that it is published in a high-impact journal read by a wider audience that might be able to influence patients to seek nephron-sparing surgery.

In this report by Tan et al, only one in three stage I tumors were managed by PN as recently as the years 2004–2007. Many similar studies document underutilization of PN, despite oncologic equivalence [4]. Consequently, one can ask why RN is overutilized for the management of stage I kidney cancer. Is it for lack of evidence of the superiority of PN in preventing overall mortality or lack of expertise with PN? Perhaps there is a sense that the other “normal” kidney will suffice to prevent future dialysis, despite the knowledge that even patients with chronic kidney disease who do not go on to dialysis have a decrease in survival [3]. In any case, there has been insufficient impetus up to now to encourage urologists to perform the preferred treatment most of the time. It may just require studies aimed at a broader audience of health care providers who will guide patients to the optimal treatment choice.

Conflicts of interest: The author has nothing to disclose.

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