#### **Editorial Comment**

The authors describe herein their results with perineal urethrostomy as a permanent solution for complex stricture disease. In men such as those with hypospadias who have undergone multiple prior failed procedures it avoids the physical and psychological trauma of yet another attempt at repair. In men with long segment dense stricture disease, especially if due to lichen sclerosis, it avoids the morbidity of a 2- or 3-stage repair with several grafts. I have also found this procedure to be a good option in elderly men with multiple comorbidities who have moderate strictures and would not be able to tolerate a substitution urethroplasty under general anesthesia. Additionally, if suffer stenosis of their perineal urethrostomy it is far simpler for them to perform serial dilation through this short tract than through the penis. I commend the authors for working to assess patient satisfaction and quality of life. As they state, patient-derived outcomes assessment will become the standard of care in this field as it has in many others.

## Dr. Sean P. Elliott

Department of Urology Surgery University of Minnesota Minneapolis, Minnesota, USA E-mail: selliott@umn.edu

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# Urinary side effects and complications after permanent prostate brachytherapy: the MD Anderson Cancer Center experience

Anderson JF, Swanson DA, Levy LB, Kuban DA, Lee AK, Kudchadker R, Phan J, Bruno T, Frank SJ Department of Radiation Oncology, The University of Texas MD Anderson Cancer Center, Houston, Texas 77030, USA

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Objectives: To evaluate acute and long-term urinary morbidity after permanent prostate brachytherapy at a single tertiary care center. To minimize the risk of long-term urinary morbidity, it is important for clinicians to be able to distinguish acute urinary side effects after prostate brachytherapy from longer-term treatment-related urinary complications.

Methods: The medical records of 351 consecutive patients who underwent prostate brachytherapy at the MD Anderson Cancer Center between 1998 and 2006 were analyzed. To evaluate the short-term urinary side effects, the Expanded Prostate Cancer Index Composite questionnaire was administered at baseline and at 1,4,8, and 12 months. Long-term urinary complications were scored using a modified Radiation Therapy Oncology Group scale.

Results: All 4 urinary subdomain scores evaluating acute urinary side effects after treatment (bother, function, incontinence, and irritation or obstruction) had returned to baseline levels by 8 months after implantation. At 5 years, the cumulative risks of late urinary complications by grade were 8.6% for grade 1 complications, 6.5% for grade 2, 1.7% for grade 3%, and 0.5% for grade 4. The most common grade 2 late urinary complications were urethral stricture (4 patients), incontinence requiring daily pads (3 patients), and intermittent hematuria (3 patients). Grade 3 complications were urinary retention requiring self-catheterization (2 patients) and severe frequency with dysuria (2 patients). The only grade 4 event was severe hemorrhagic cystitis.

Conclusions: Short-term urinary side effects after prostate brachytherapy are common, follow a predictable course, and typically resolve within 1 year. Conservative management of short-term urinary side effects is recommended to minimize the risk of long-term urinary complications.

#### **Editorial Comment**

The authors describe the cumulative incidence of acute urinary side effects and delayed urinary complications of prostate brachytherapy. The cumulative incidence of urethral stricture was similar to what has been previously reported - just under 5% (1). A review of the grade 2-4 complications reveals them all to be problems that are very difficult to manage. Urethral strictures in radiated tissue rarely have a durable response to optical urethrotomy. Urinary incontinence after brachytherapy is much more troublesome to treat than after radical prostatectomy. Moderate to severe dysuria has no good solution. When examining Figure-2 in the article - a graph of the cumulative incidence of late urinary complications - one sees a trend common to most radiation series. That trend is that complications continue to accrue at a steady rate through the end of the follow-up period. To measure the true risk of these complications the follow-up needs to be carried out much further. Urethral complications of radiation therapy are not rare and continue to be a vexing problem to manage.

#### Reference

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> Dr. Sean P. Elliott Department of Urology Surgery University of Minnesota Minneapolis, Minnesota, USA E-mail: selliott@umn.edu

### UROLOGICAL ONCOLOGY

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# Long-term 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 follow-up

Järvinen R, Kaasinen E, Sankila A, Rintala E; FinnBladder Group Helsinki University Hospital, Department of Urology, Helsinki, Finland Eur Urol. 2009; 56: 260-5

Background: The long-term prospective data on bacillus Calmette-Guérin (BCG) and mitomycin C (MMC) instillation therapy are limited. Objective: To compare the long-term benefit of BCG and MMC maintenance therapy in patients with recurrent bladder carcinoma.

Design, Setting, and Participants: Eighty-nine patients with frequently recurrent TaT1 disease without carcinoma in situ (CIS) were eligible. Originally, the patients were enrolled in the prospective FinnBladder I study between 1984 and 1987 and randomised to receive BCG or MMC. Both regimens involved five weekly instillations, followed by monthly instillations for 2 yr. Because of alkalinising the urine and adjusting the dose to bladder capacity, the average concentration of MMC was low: 30-40 mg in 150-200 ml of phosphate buffer. Overall median follow-up time was 8.5 yr, whereas the median follow-up time of the patients who were still alive was 19.4 yr.

Measurements: Primary end points were time to first recurrence and overall mortality. Secondary end points were progression and disease-specific mortality.

Results and Limitations: Thirty-six of 45 patients (80.0%) in the MMC group experienced recurrence in contrast to 26 of 44 patients (59.1%) in the BCG group. This finding was reflected in significantly lower cumulative