

patients (85%) had successful outcomes. Treatment failed in 2 patients with short fistulas larger than 1.5 and 2.0 cm in diameter. Occlusion therapy represents a safe and minimally invasive approach that may be offered as a first option for fistulas of the urinary tract with a diameter less than 1.5 cm.

Those iatrogenic fistulas might be prevented by the use of Gelatine Matrix Haemostatic Sealant (GMHS). GMHS with thrombin is used in surgical procedures to adjunct haemostasis when control of bleeding by conventional procedures is ineffective or impractical. In addition, the stable matrix expands up to 20% in volume when in contact with blood, resulting in a closure of the access tract and compressing the surrounding tissue. Recently, we used this sealant very successful close to the vesicourethral anastomosis (radical prostatectomy) or the neovesicourethral anastomosis (cystoprostatectomy) as an additional sealant after PCNL (1) and mini-PCNL (2). This modified technique might help to prevent iatrogenic induced epithelialized urinary fistula. Muto et al. report offers a new choice to treat occurred ones less invasive.

References

1. Lee DI, Clayman RV: Use of gelatin matrix to rapidly repair diaphragmatic injury during laparoscopy. *Urology*. 2004; 63: 4192.
2. Nagele U, Schilling D, Kuczyk M, Anastasiadis A, Stenzl A, Sievert KD: The use of floseal to close the track of the mini-PCNL shortens the hospital stay. *Eur Urol*. 2005; Suppl. 4: 197 (#779).

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UROLOGICAL ONCOLOGY

Predicting Recurrence and Progression in Individual Patients with Stage Ta T1 Bladder Cancer Using EORTC Risk Tables: A Combined Analysis of 2596 Patients from Seven EORTC Trials

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Objectives: To provide tables that allow urologists to easily calculate a superficial bladder cancer patient's short- and long-term risks of recurrence and progression after transurethral resection.

Methods: A combined analysis was carried out of individual patient data from 2596 superficial bladder cancer patients included in seven European Organization for Research and Treatment of Cancer trials.

Results: A simple scoring system was derived based on six clinical and pathological factors: number of tumors, tumor size, prior recurrence rate, T category, carcinoma in situ, and grade. The probabilities of recurrence and progression at one year ranged from 15% to 61% and from less than 1% to 17%, respectively. At five years, the probabilities of recurrence and progression ranged from 31% to 78% and from less than 1% to 45%.

Conclusions: With these probabilities, the urologist can discuss the different options with the patient to determine the most appropriate treatment and frequency of follow-up.

Editorial Comment

The risk of superficial bladder cancer to recur or to progress is relatively well known. But how high is this risk exactly? Which factors contribute to recurrence, and, more importantly, to progression? How can the risks for an individual patient be calculated according to his or her individual risk factors?

Clearly, the urologist would like to have nomograms at hand to help with these tasks – similar to the well-known Partin tables for prostate cancer.

This hope became reality with the important work from Sylvester and coworkers. From the large database of the EORTC study group they calculated risk factors for superficial bladder cancer and created a model where the risk factors were evaluated in uni- and multivariate statistics. A scoring system helps to assess the probability of an individual patient for recurrence and progression. Interestingly, with regard to progression the recurrence status at the first follow-up cystoscopy is (next to CIS status) of prognostic importance. Only 8.7% of patients without a 3 month's recurrence progressed, whereas 25.6% with a recurrence at 3 months suffered later progression.

This paper is highly recommended reading for every urologist dealing with urothelial cancer.

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Prevention of Bladder Cancer: A Review

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Introduction: Bladder cancer represents an ideal tumor model to test and apply cancer prevention strategies. In addition to reviewing the epidemiology of transitional cell carcinoma (TCC), we review the current status and the future directions of bladder cancer prevention.

Materials and Methods: A literature review of peer-reviewed articles which address bladder cancer prevention was performed.

Results: Pre-clinical and limited clinical data suggest that bladder cancer is responsive to efforts to delay or prevent its development in at-risk patients, and in reducing the risk of recurrence in patients with established disease. Many epidemiologic studies, however, investigating natural products, such as vitamins and herbal compounds, lack conclusive evidence of their chemopreventive effects.

Conclusions: While many agents hold promise in the prevention of bladder cancer, none currently can be recommended as proven chemoprevention strategies. Improving the accuracy of patient risk assessment and identification of surrogate endpoint biomarkers are crucial to the testing of these strategies. Efficient study design will ensure rapid and substantial advances in the chemoprevention of bladder cancer.

Editorial Comment

Doctor, what can I do to prevent my risk of bladder cancer?

These or similar questions might not be so easily answered given the amount of conflicting data on this topic. Reading the review of Leppert and coworkers might give some help. The well-known data e.g. on smoking

and occupational exposure are summarized and commented, and many new information on dietary changes (fat, soy bean, vitamins, selenium) and nonsteroidal anti-inflammatories are given. With this paper at hand, a well-founded answer to the above question is possible.

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FEMALE UROLOGY

A Magnetic Resonance Imaging-Based Study of Retropubic Haematoma after Sling

Procedures: Preliminary Findings

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Objective: To determine, using magnetic resonance imaging (MRI), the incidence of retropubic haematoma and any associated clinically significant effects after a xenograft (porcine dermis) sling (XS) or the tension-free vaginal tape (TVT) procedure.

Patients and Methods: Between October 2003 and March 2004, 24 consecutive patients presenting with stress urinary incontinence (SUI) were enrolled in this prospective study; 12 each underwent an XS or TVT procedure. A vaginal balloon pack was used for only 3 h after XS and not after TVT. All patients had pelvic MRI 6-8 h after surgery. The primary outcome measure was the incidence and distribution of retropubic haematoma after each sling technique. Secondary outcome measures included the interval to the first three spontaneous voids, the bladder emptying efficiency of the first three voids, a visual analogue scale pain score at 24 h after surgery, and the short-term (6-month) cure rate for SUI.

Results: Overall, six (25%) patients (four XS and two TVT) developed a retropubic haematoma. Most commonly, they spread along the right paravesico-urethral space between the right half of the levator ani and the bladder neck. Patients with large haematomas took significantly longer to void (median 14.5 vs 6.0 h, $P = 0.048$). There was no difference in pain score in patients with or without haematoma. None of the patients had clinically detectable haematomas in the suprapubic wound. All six patients with haematomas were cured or improved at the 6-month follow-up.

Conclusions: MRI is a useful noninvasive method for detecting retropubic haematomas soon after surgery. There was a surprisingly high incidence of retropubic haematomas, especially after the XS procedure. Retropubic haematomas may influence postoperative voiding efficiency.

Editorial Comment

The authors review 24 patients who underwent a suburethral sling using either xenograft or tension free vaginal tape. All patients had a pelvic MRI approximately 6-8 hours after surgery. The MRI was utilized to evaluate for