greatly facilitate future clinical studies in terms of consistency of vaccine administered and the provision of primed DCs for in vitro assessment of response.

Editorial Comment

This is a very well done scientific research with immediate potential clinical implications. As the authors stated, one of the most significant limitation to current dendritic cell-based immunotherapy is the need to prepare fresh vaccine repeatedly. The ability to culture and cryopreserve numerous aliquots of identical dendritic cells from a single venesection would reduce hospital intervention for patients, and greatly facilitate clinical trials by allowing the manipulation of dendritic cells before or after freezing, and their subsequent use as sequential vaccines.

The authors demonstrated the feasibility of a potentially generic approach to cellular immunotherapy, and the preparation of identical aliquots of dendritic cell vaccine that were readily tested for safety and immunoreactivity before injecting into patients. Dendritic cell therapy resulted in significant in vitro immunological responses in patients even with very advanced disease. Also, in this study, dendritic cell vaccine showed to be safe and non-toxic

Dr. Francisco J.B. Sampaio
Full-Professor and Chair, Urogenital Research Unit
State University of Rio de Janeiro
Rio de Janeiro, Brazil

RECONSTRUCTIVE UROLOGY

Vaginal and penile reconstruction

Sievert KD
Department of Urology, University of Munster, Munster, Germany
Curr Opin Urol. 2003; 13: 489-94

Purpose of Review: Reconstructive surgery for patients with genital abnormalities or for patients who require reconstructive efforts is challenging. This review highlights those articles, which are outstanding among all those important papers, which have been published during the last year (2002-2003).

Recent Findings: A greater understanding of embryonal development improves the success of reconstructive surgery. Other factors, such as the patient's sex, influence the surgical technique used and the degree of invasiveness or complexity. In the adult the pressure to shorten hospital stays has played a big part in the continual modification and enhancement of surgical techniques. In addition to modified techniques, new off-the-shelf materials are introduced to the clinic, which seem to have the potential to improve the surgical outcome and shorten hospital stays.

Summary: With the continued successful basic anatomy and basic research, reconstructive surgery brings higher success rates. Long-term results are still required to validate the reliability of these new surgical techniques and materials.

Editorial Comment

This paper nicely outlines the current status of reconstruction of male and female genitalia for a successful reconstruction in genital abnormalities a greater understanding of the embryonal development is advantages. Flap technology and prefabrication are the currently preferred methods for surgical success in transsexual

patients. However, here again we are awaiting the clinical application of tissue-engineered segments for both the penile autologous prosthesis and vaginal cavity.

Dr. Arnulf Stenzl
Professor and Chairman of Urology
Eberhard-Karls-University Tuebingen
Tuebingen, Germany

Orthotopic bladder substitution in women: nontraditional applications

Lee CT, Hafez KS, Sheffield JH, Joshi DP, Montie JE
Department of Urology, University of Michigan, Ann Arbor, Michigan, USA
J Urol. 2004; 171: 1585-8

Purpose: Orthotopic urinary diversion is a feasible and optimal technique for many women undergoing cystectomy. Although successful outcomes have been achieved, groups at most centers have strict selection criteria. We evaluated our experience with female orthotopic diversion in traditional and nontraditional candidates.

Materials and Methods: From September 1, 1995 to February 6, 2003 53 females with a mean age of 62 years underwent orthotopic bladder substitution. Median followup was 24 months. Clinicopathological parameters were evaluated in traditional and nontraditional patients. The nontraditional subset comprised 22 women older than 70 years (12) or had a history of pelvic radiation (2), neoadjuvant chemotherapy (6) or stress incontinence (2).

Results: The entire group had a mean operative time, blood loss and hospital stay of 6.2 hours, 1,135 ml and 8.2 days, respectively. Tumor was organ confined in 38 and extravesical in 14 patients with bladder cancer. Complications were detected in 20 patients, including 9 who were traditional (23%) and 11 who were nontraditional (50%). Daytime and nighttime continence was reported by 46 (87%) and 45 (85%) patients, respectively, of whom 11 (21%) required intermittent catheterization. Of the patients with cancer 42 were disease-free, 2 were alive with disease and 6 died of disease. The nontraditional subset was older ($p < 0.0003$) and had shorter followup ($p = 0.05$), a higher American Society of Anesthesiologists score ($p = 0.01$) and a shorter overall survival ($p = 0.001$) than the traditional group. Continence was seen in 19 of 22 nontraditional patients (86%) and 4 (18%) required intermittent catheterization.

Conclusions: Orthotopic neobladder diversion offers excellent clinical and functional results, and should be the diversion of choice in most women following cystectomy. A subset of less favorable candidates can also successfully undergo orthotopic substitution with a tolerable toxicity profile.

Editorial Comment

In this paper the authors confirm previous studies on a successful use of orthotopic neobladder in a wide range of female patients. Despite extravesical disease, an age older than 70 years, a history of pelvic radiation, neoadjuvant chemotherapy, or preoperative stress incontinence, these patients had a continence rate of 86% and an intermittent catheterization rate of 18%. None of the patients had a urethral recurrence after a median follow up of 24 months.

This study reinforces previous suggestions that an orthotopic bladder substitution in women undergoing radical cystectomy is not only feasible but also applicable to a majority with localized bladder tumors. Not everybody might agree with the technique of surgery by the authors, which might be the reason for a higher rate

of urinary retention compared to other reports, but undoubtedly this paper shows that unfavorable factors must be a contraindication for an orthotopic neobladder.

Dr. Arnulf Stenzl
Professor and Chairman of Urology
Eberhard-Karls-University Tuebingen
Tuebingen, Germany

UROLOGICAL ONCOLOGY

Primary T1G3 bladder cancer: organ preserving approach or immediate cystectomy?

Thalmann GN, Markwalder R, Shahin O, Burkhard FC, Hochreiter WW, Studer UE
Department of Urology and Institute of Pathology, University of Bern, Inselspital, Bern, Switzerland
J.Urol. 2004; 172: 70-75.

Purpose: In this retrospective nonrandomized study we compared the long-term outcome in patients with newly diagnosed stage T1G3 bladder cancer treated with transurethral resection and bacillus Calmette-Guerin or immediate cystectomy.

Materials and Methods: Of 121 patients with a median age of 67 years (range 36 to 88) diagnosed with primary T1G3 bladder cancer between 1976 and 1999, 92 were treated by transureteral resection with additional intravesical bacillus Calmette-Guerin and 29 were treated with immediate cystectomy.

Results: Of the 92 patients treated with an organ preserving approach 29 remained disease-free, local recurrence developed in 33 (36%) and progression developed in 30 (33%) at a median followup of 6.9 years (range 0.6 to 16.5). Of these 92 patients 27 (29%) underwent deferred cystectomy at a median of 12.9 months (range 4.8 to 136), of whom 10 (37%) with a median postoperative followup of 19 months (range 2 to 173) died of progressive disease with a median survival of 13 months (range 3 to 34) after cystectomy. The majority of patients who died of progressive disease refused cystectomy, were referred too late for cystectomy, were inoperable or had upper urinary tract disease. Six of the 29 patients (21%) undergoing immediate cystectomy had progression at a median of 13.2 months (range 5.5 to 37). Overall and tumor specific survival at 5 years in patients treated with an organ preserving approach was 69% and 80%, and in those treated with immediate cystectomy it was 54% and 69%, respectively.

Conclusions: The results of this analysis demonstrate that the concept of an organ preserving approach is acceptable and spares the bladder in approximately half of the patients with primary T1G3 bladder cancer. Of the patients 30% require deferred cystectomy, making meticulous, close followup mandatory.

Editorial Comment

This paper is an non-randomized observation of patients with high risk bladder cancer treated either with TUR-B and BCG or with immediate cystectomy.

The data suggest alltogether that T1G3 bladder carcinoma is a dangerous disease but can be treated effectively by TUR-B and BCG. Cystectomy may be prevented by this treatment, according to this conservative estimate, in approximately 50%.

Interestingly, if patients were looked upon closely, median time to progression, overall mortality, and all other outcome data were similar between two groups. In both groups around 15% showed positive lymph nodes at lymphadenectomy.