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OVERVIEW

Current Therapy

The "Current Therapy" session integrated the clinical spectrum of superficial bladder tumors with the natural history and current results among treated patients.

Dr. Soloway reviewed the presentation, diagnosis, and current treatment options and recommended follow-up of superficial bladder tumors. Bladder tumors are accessible to repeated evaluations with cystoscopy, biopsy or resection, voided urine cytology, and bladder irrigation specimens for flow cytometry. Risk factors predictive for tumor recurrence and progression were identified among patients who are appropriate candidates for intensive intravesical therapy.

Bacillus Calmette-Guerin (BCG) is the most effective intravesical therapy for superficial bladder tumors. Dr. Herr presented results from numerous control trials showing that BCG can prevent or reduce tumor recurrences, abrogate tumor invasion and improve survival over surgery alone. Further, BCG seems to protect the remaining bladder mucosa from future adverse tumor events but over time exposes the prostatic and upper tract uroepithelium as potential sites for new tumor occurrences. For example, it is estimated that between 13 and 35% of successfully treated bladder tumor patients will relapse in the prostate, ureter or renal pelvis, and up to one-half of these may be invasive tumors. This suggests that a combination of intense therapy directed to premalignant and early bladder lesions coupled with a systemic chemoprevention strategy designed to protect the urothelium as a whole will be required to reverse a panurothelial tumor diathesis.

A model for the development of a chemoprevention strategy was suggested by Dr. Logothetis who observed differential responses of superficial and invasive bladder tumors to systemic chemotherapy. Cytotoxic therapy may kill invasive tumor cells but does not prevent progression or re-emergence of superficial tumors, whereas immunotherapy with BCG or interleukin-2 is ineffective against advanced tumors but may eradicate superficial lesions. He suggested a combination of cytotoxic and biologic agents is required to control bladder tumors in patients with metastases. *In vitro* studies seem to support this supposition by showing synergistic antitumor activity against bladder carcinoma cell lines with a combination of 5-FU and 4-HPR.

Each of these presentations was followed by lively discussions focusing on short-term and durable tumor response rates, frequency and patterns of relapse and suggestions for strategies to overcome treatment failures. The current climate of improved therapy and better understanding of the biology of transitional cell carcinoma make urothelial tumors ideal targets for chemoprevention strategies.

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