



Treatment of Non-Muscle-Invasive Bladder Cancer

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NON-MUSCLE-INVASIVE BLADDER CA

Bladder Cancer

- Incidence in US: 60,000
- 13,000 deaths per year
- Most present with noninvasive disease
- Most cases present with blood in the urine
- Smoking is the biggest risk factor

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Cystoscopy

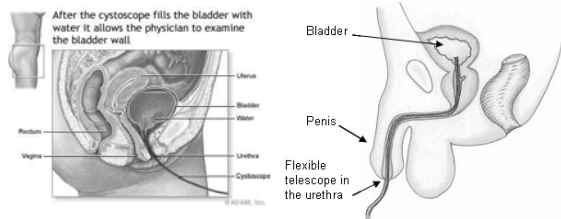


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Cystoscopy

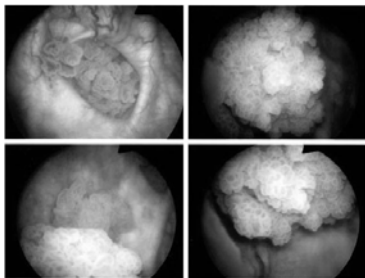
- Office procedure
- Takes about 1 minute
- Moderate discomfort
- Minimal risk
- Does not require general anesthesia

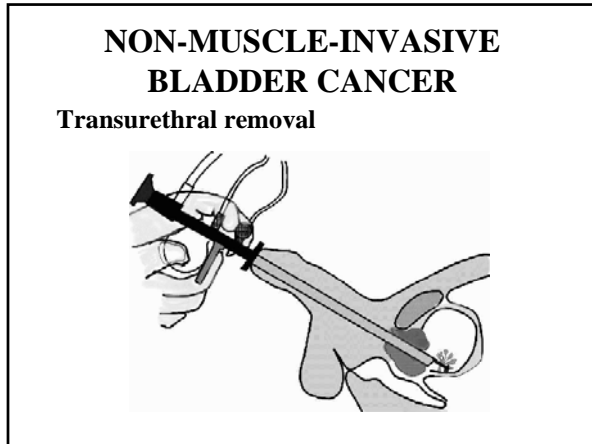
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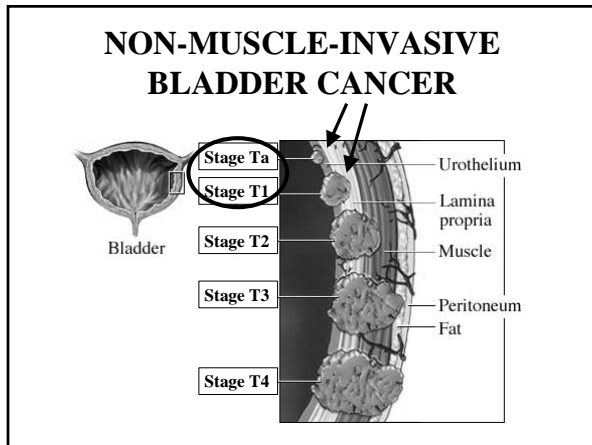


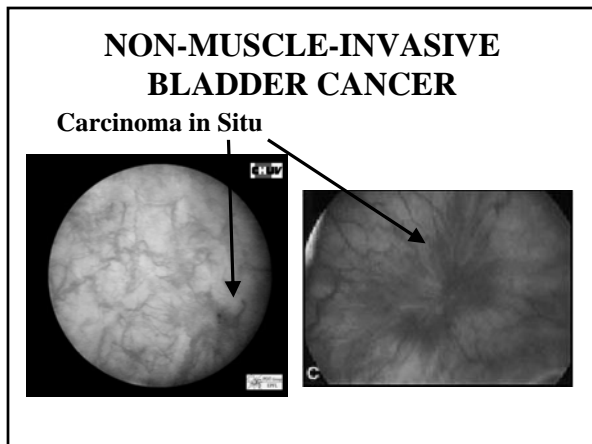
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Papillary Bladder Tumors









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Treatment Strategies

- Ta disease – endoscopic removal with possible intravesical therapy
- T1 disease – endoscopic removal with possible intravesical therapy
- Carcinoma in situ – requires intravesical therapy
- T2-T4 disease – requires more aggressive treatment

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Intravesical Therapy

- Given during removal to prevent recurrence
- Given after removal to cure residual disease
- Can be given after surgery to prevent recurrence

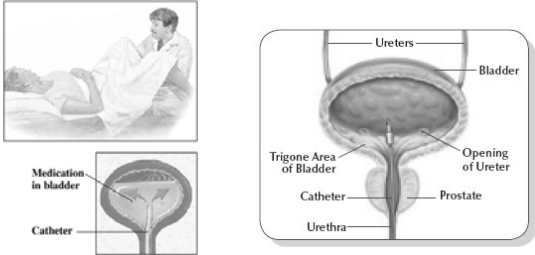
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Intravesical Therapy

- Medication given directly into the bladder
- Done in urologist's office
- Catheter placed in bladder
- Medication placed through catheter into bladder for about 1 hour
- Given once per week for 6 weeks

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Intravesical Therapy

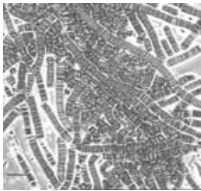


Which agents to give?

- Immunotherapy
 - BCG
 - Interferon
- Chemotherapy
 - Mitomycin C
 - Thiotepa
 - Doxorubicin, epirubicin, valrubicin
 - Gemcitabine

Immunotherapy: BCG

- Attenuated *M. bovis* (TUBERCULOSIS)
- Used since 1976
- Weekly instillation X 6
- Maintenance therapy varies
- Fever, burning, infection



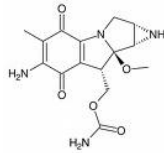
Interferon alpha-2B

- Another medication given with BCG
- Allows for lower BCG dose and may reduce toxicity
- Can be used when BCG fails



Chemotherapy: Mitomycin C

- Chemotherapy
- Often given directly after endoscopic removal
- Side effects include irritative symptoms, fever
- Reduces recurrent disease



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How are these tumors followed?

- 1st Year – cystoscopy every 3 months
- 2nd Year – cystoscopy every 6 months
- 3rd Year – cystoscopy once
- 4th Year – cystoscopy once
- If another tumor is found, start all over again

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How are these tumors followed?

- 5th Year – Consider stopping cystoscopy
- Your urologist checks urine for cancer cells at every visit
- Urine is checked periodically for blood by your primary care physician
- If you see blood in the urine → call your urologist

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Office treatment of recurrent tumors

- Can be done for very small tumors
- The urologist identifies the tumor and cauterizes it in the office
- Close follow up required
- An option for patients with frequent recurrences


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How can I prevent tumors from coming back?

- Stop smoking
- Stop smoking!
- Stop smoking!!
- Maintenance bladder therapy – only for those with frequent recurrences

Conclusions

- Most bladder tumors are not muscle invasive
- Most cases of bladder cancer do not require removal of the bladder
- Therapy directly into the bladder is an effective treatment option for bladder cancer
- Close follow up with your urologist required
- Smoking cessation decreases risk of recurrent disease



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