BLADDER CANCER

THREE DISEASES
1. Superficial low grade
2. Invasive high grade
3. Carcinoma-in-situ (CIS)

CLINICAL STAGING

TO   Ta  Noninvasive low grade
     Tis  Ca-in-situ

T1   Invades submucosa only
T2   Invades superficial muscle
T3   Invades deep muscle or perivesical fat
T4   Invades contiguous organs

SUPERFICIAL LOW GRADE
Symptoms:  Hematuria
Diagnosis:  Bladder biopsy. Typical appearance on cystoscopy
            Urine cytology highly unreliable
Treatment:  TURBT
            Laser ablation
Recurrence rate 60-70%
            Long term surveillance cystoscopies essential
            Tend to not progress in stage or grade
Topical therapy  BCG for multiple tumors or frequent recurrences

INVASIVE HIGH GRADE
Symptoms:  Hematuria, bladder irritative symptoms, and sx of mets
Diagnosis:  TURBT (deep), with random biopsies for CIS
Staging:   Clinical + CT scan   Chest X-ray
            Bone scan if sx suggest or alk phos elevated
Treatment:  T1:  TURB with close followup cystoscopies and cytology may suffice
            T2&3: Radical cystectomy only treatment capable of cure
                  Radiation
                  Chemotherapy
            T4:  Chemoradiation, ?? exenteration
50% 5 year survival overall
Death usually from mets, not local recurrence

CARCINOMA IN SITU
Symptoms:  Hematuria (usually microscopic), bladder irritative symptoms
Diagnosis:  Cystoscopic appearance
            Bladder biopsies
            Urine cytology, FISH
Treatment:  Topical intravesical
            BCG
            Mitomycin
            Other: Thiotepa, doxorubicin, interferon
            Cystectomy for failures of topical Rx