

# Genito-Urinary Tumors

Bladder Tumors

Carcinoma of the prostate

Testicular Tumors

Prof. H.Farsi

0505620033

Pager:2402

Ref.: Current Surgical Diagnosis & Treatment

- ALL MY CLINICAL TEACHING WILL BE IN ***THE ESWL UNIT.***
- WHERE IS THE ESWL UNIT?
- IT IS IN ***THE BASEMENT*** OF THE CLINIC BUILDING, BESIDE THE DIALYSIS UNIT, AND NOT THE HOSPITAL BUILDING.
- Sunday: Starts at 08:300
- Wednesday: Starts at 09:00
- Please Note: ***NO STUDENT IS ALLOWED TO JOIN IF HE/SHE IS MORE THAN 15 min Late.***

# Bladder Tumor

# Epidemiology

- 2<sup>nd</sup> most common GU tumor
- M:F=2:1
- 60-65y
- Multifocal
- Tendency for recurrence

# Risk Factors

- Industrial carcinogens
  - Petrochemicals, rubber, leather, paint
- Cigarette smoking
- Artificial sweeteners??
- Phenacitin and analgesic abuse
- Cyclophosphamide
- Oncogenic virus
- Schistosomiasis
- Prolonged catheterization
- Neglected bladder stones

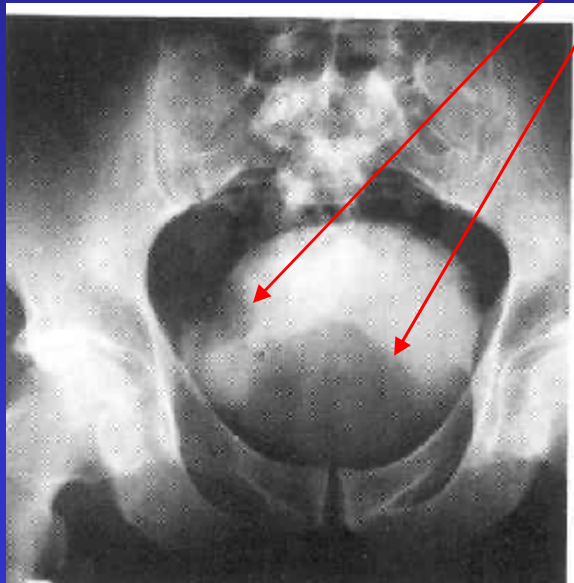
# Clinical Picture

- **Clinical Picture:**
  - 1) Hematuria, microscopic or gross.
  - 2) Irritative symptoms (? Cystitis), e.g. dysuria, frequency, urgency etc.
  - 3) Incidental: Urine, X-Ray, cystoscopy
- **Signs:**
  - Metastasis
  - Uremia
- **Urine:**
  - Analysis: RBCs, WBCs
  - Urine tumor markers
  - Cytology
- **Radiological tests:**
  - 1) IVP
  - 2) Pelvic US
  - 3) CT or MRI

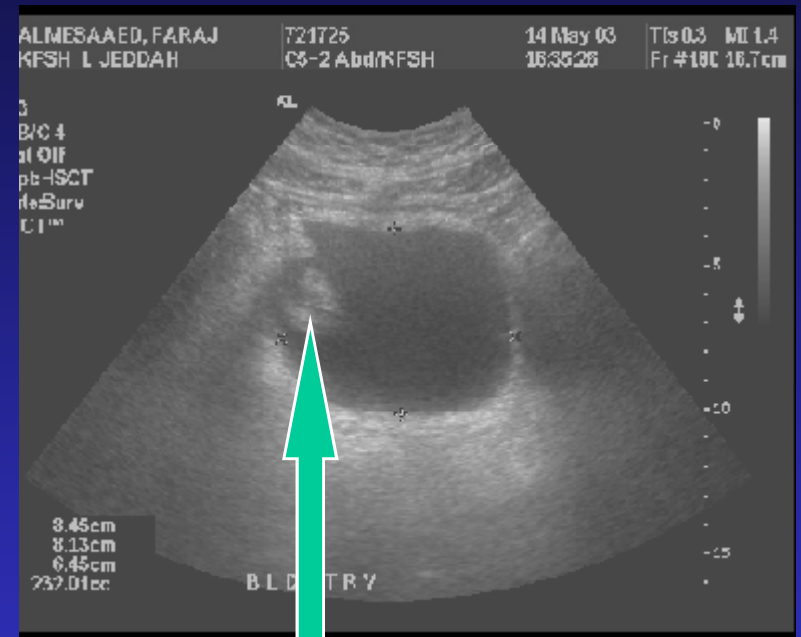
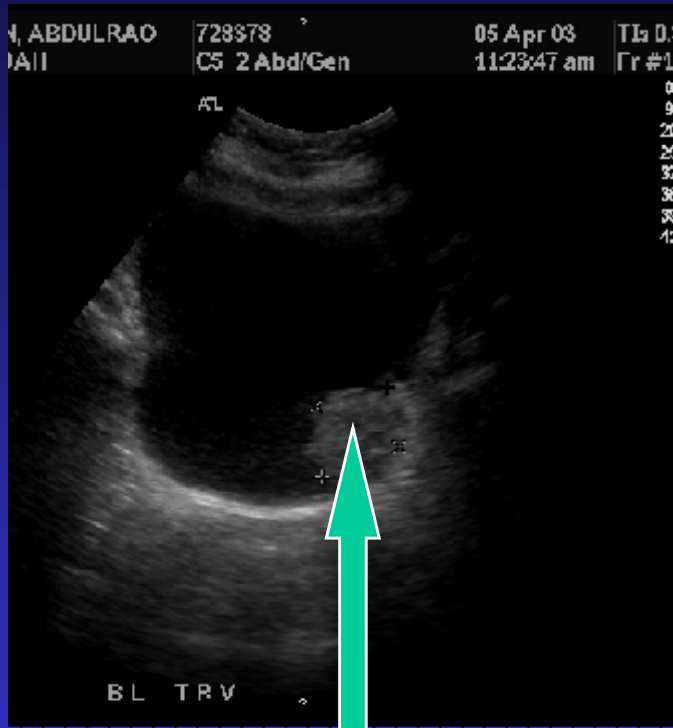
# IVP



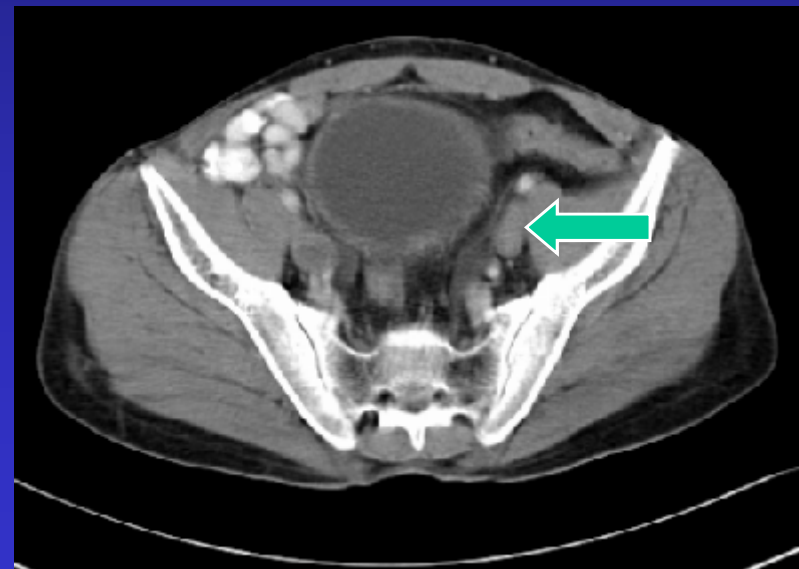
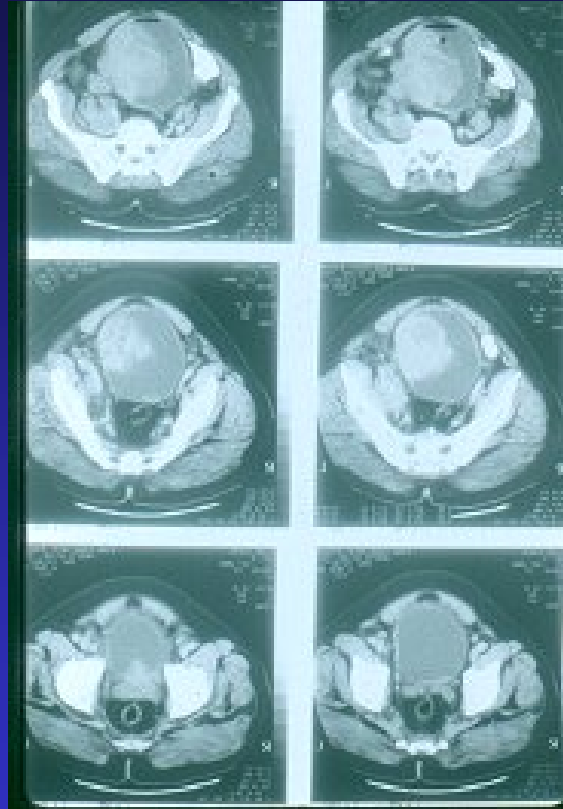
Filling Defect



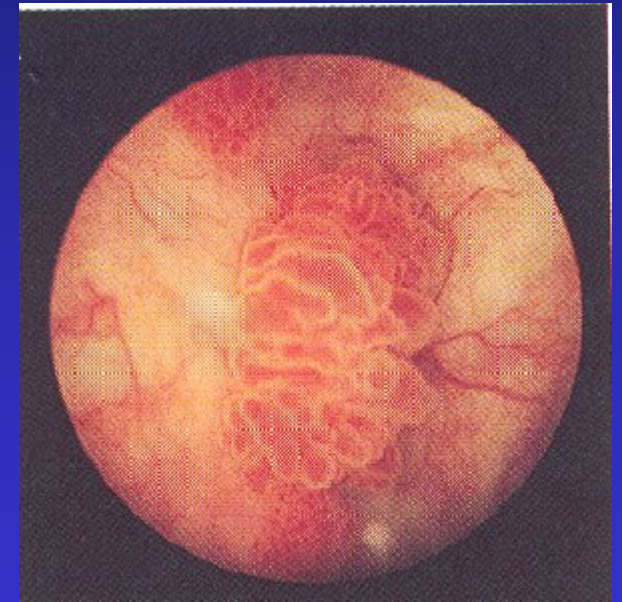
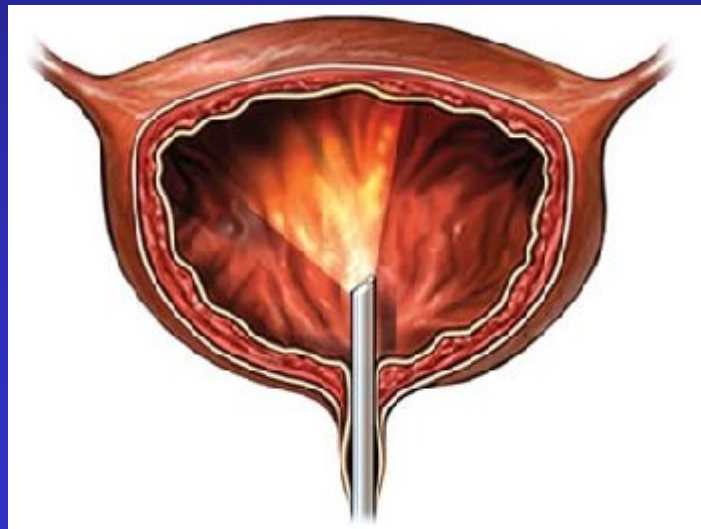
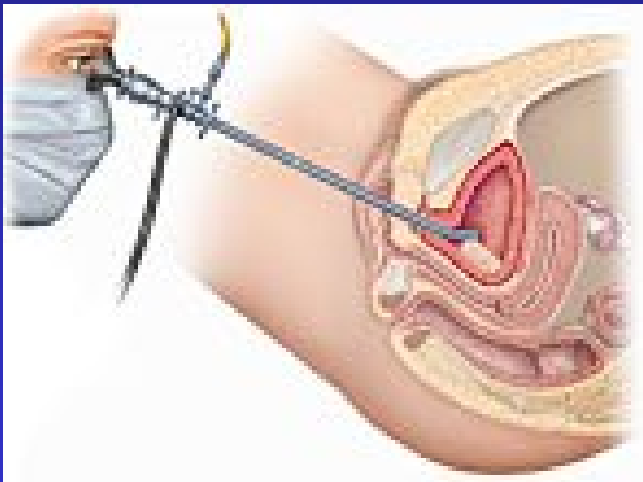
# Ultrasound



# CT Scan



- Cystoscopy & Biopsy



# Bimanual Examination



# Pathology

- Histology
  - Epithelial
    - Transitional cell
    - Squamous cell
    - Adenocarcinoma
    - Undifferentiated
  - Nonepithelial
- Grade ( differentiation)
- Level of invasion

*Superficial*

*Deep*

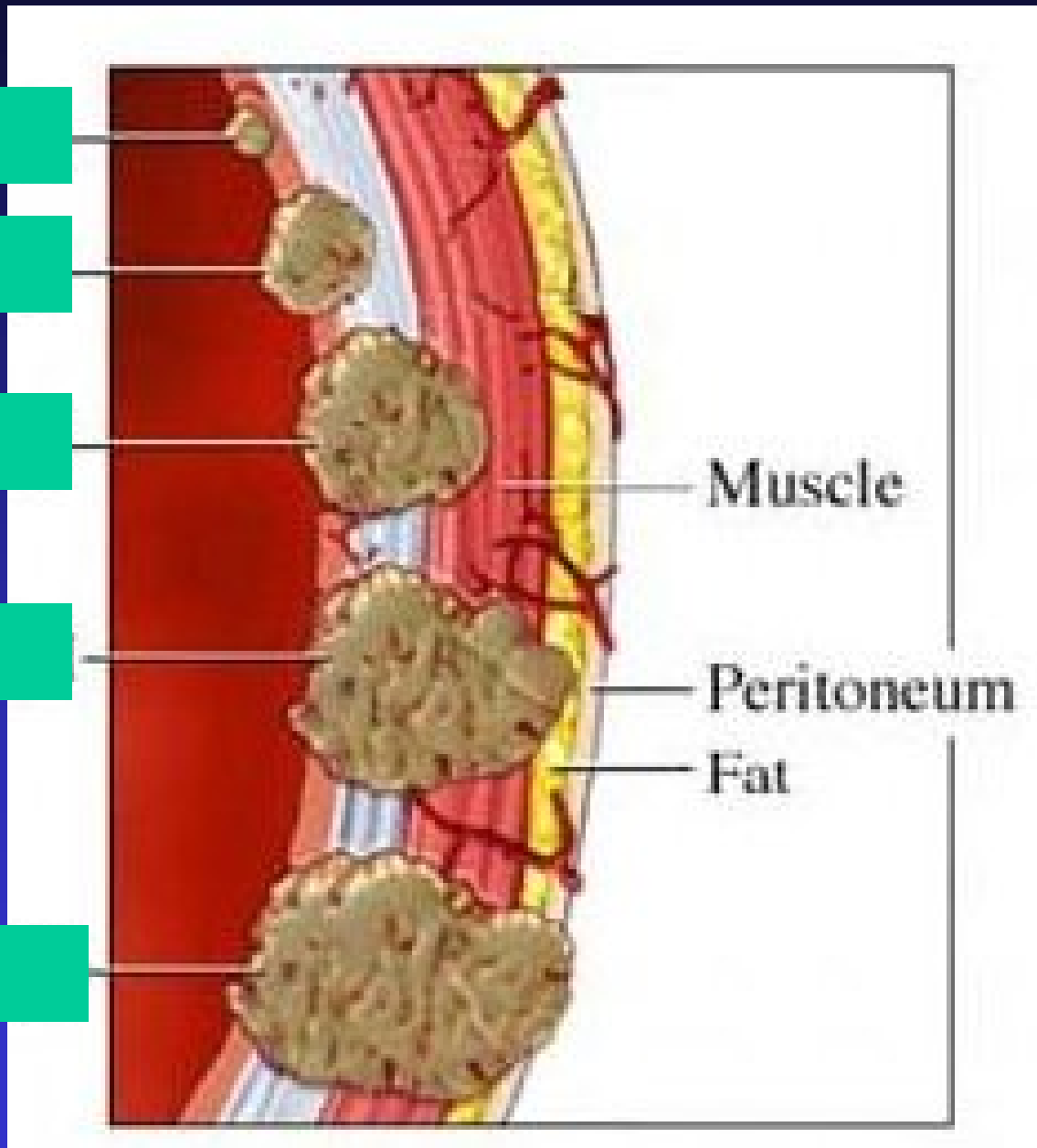
TA

T 1

T 2

T 3

T 4



# Metastasis

- L.N.
- Lung
- Liver
- ??? Bone

# Treatment of Transitional Cell Tumor

## 1. Surgery:

- TransUrethral Resection of Bladder Tumor (TURBT)
- Radical Cystectomy

## 2. Radiotherapy

## 3. Systemic chemotherapy

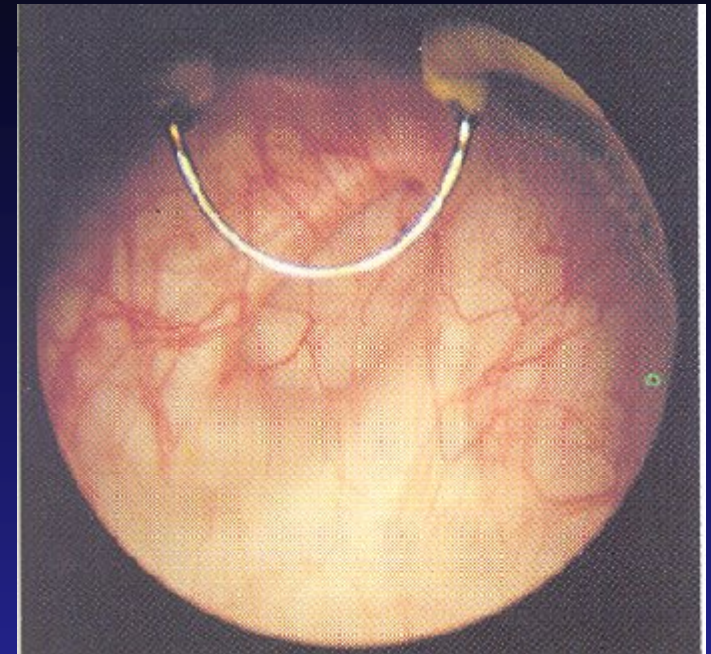
## 4. Local chemotherapy

## 5. Local immunotherapy (BCG)

...continue treatment

- **Superficial Tumor**

- TURBT+single dose intravesical chemo
- Recurrence:
  - TURBT:
    - Local chemotherapy
    - Local immunotherapy (BCG)

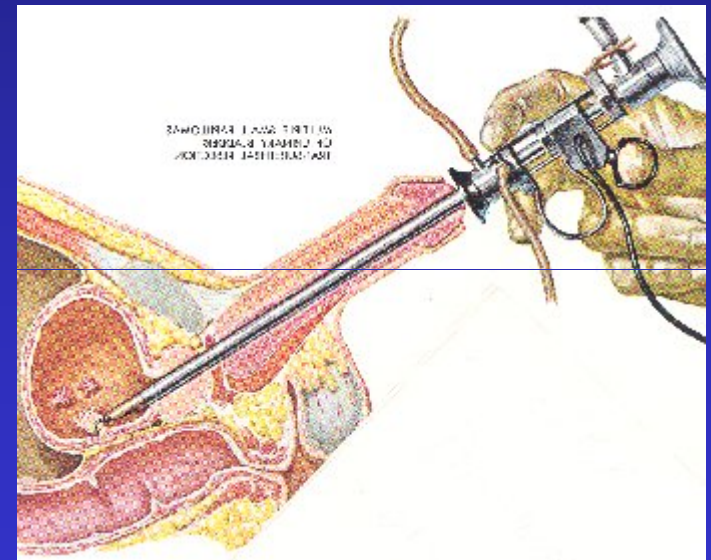


- **Deep Tumor:**

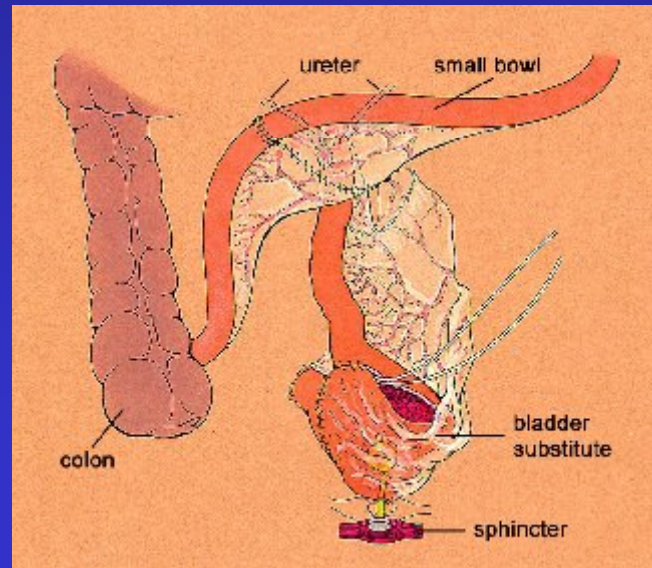
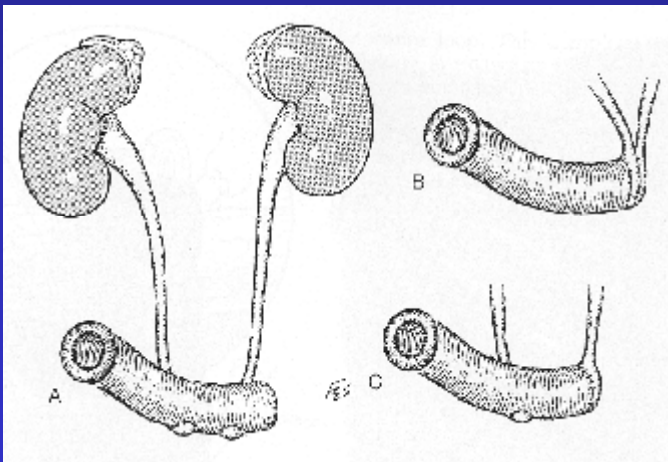
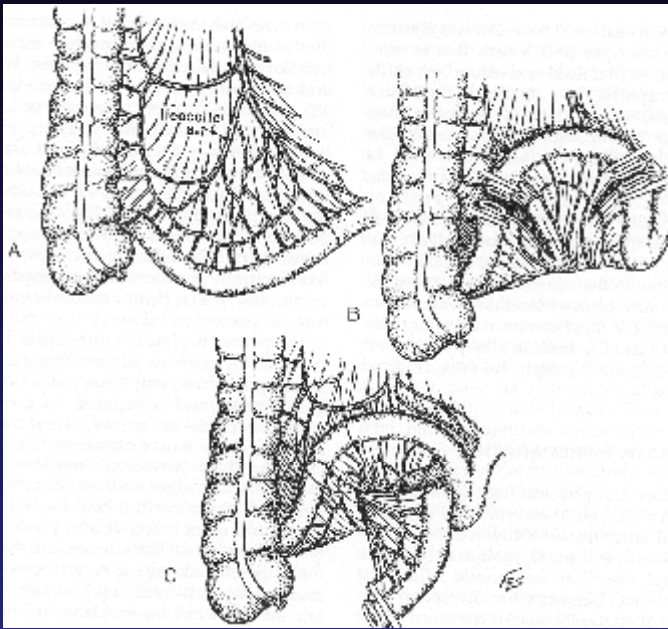
- Radical cystectomy
- Radiotherapy

- **Metastatic Tumor:**

- Palliative surgery
- Palliative care
- Systemic chemotherapy



# Diversion



A patient with an ileal conduit diversion after cystectomy. The oma bag is supported in a pouch of the patient's own design.



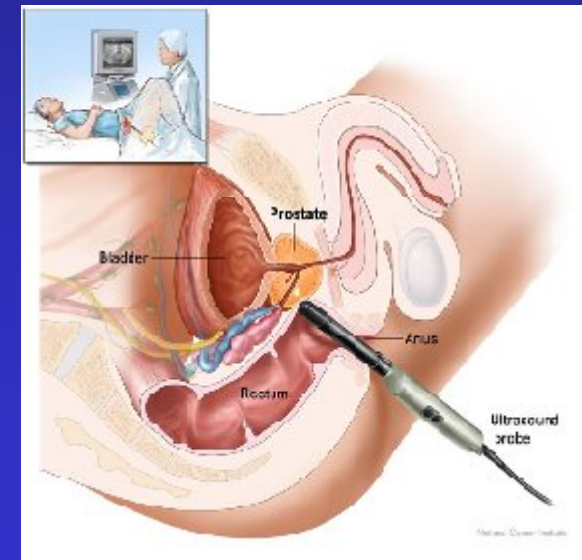
# Ca Prostate

# Epidemiology

- The most common cancer in western men
- Elderly men >50
- No relation to BPH
- Etiology:
  - Genetic
  - Environment
  - Hormones
  - Diet
  - Chemicals
  - Virus

# Diagnosis

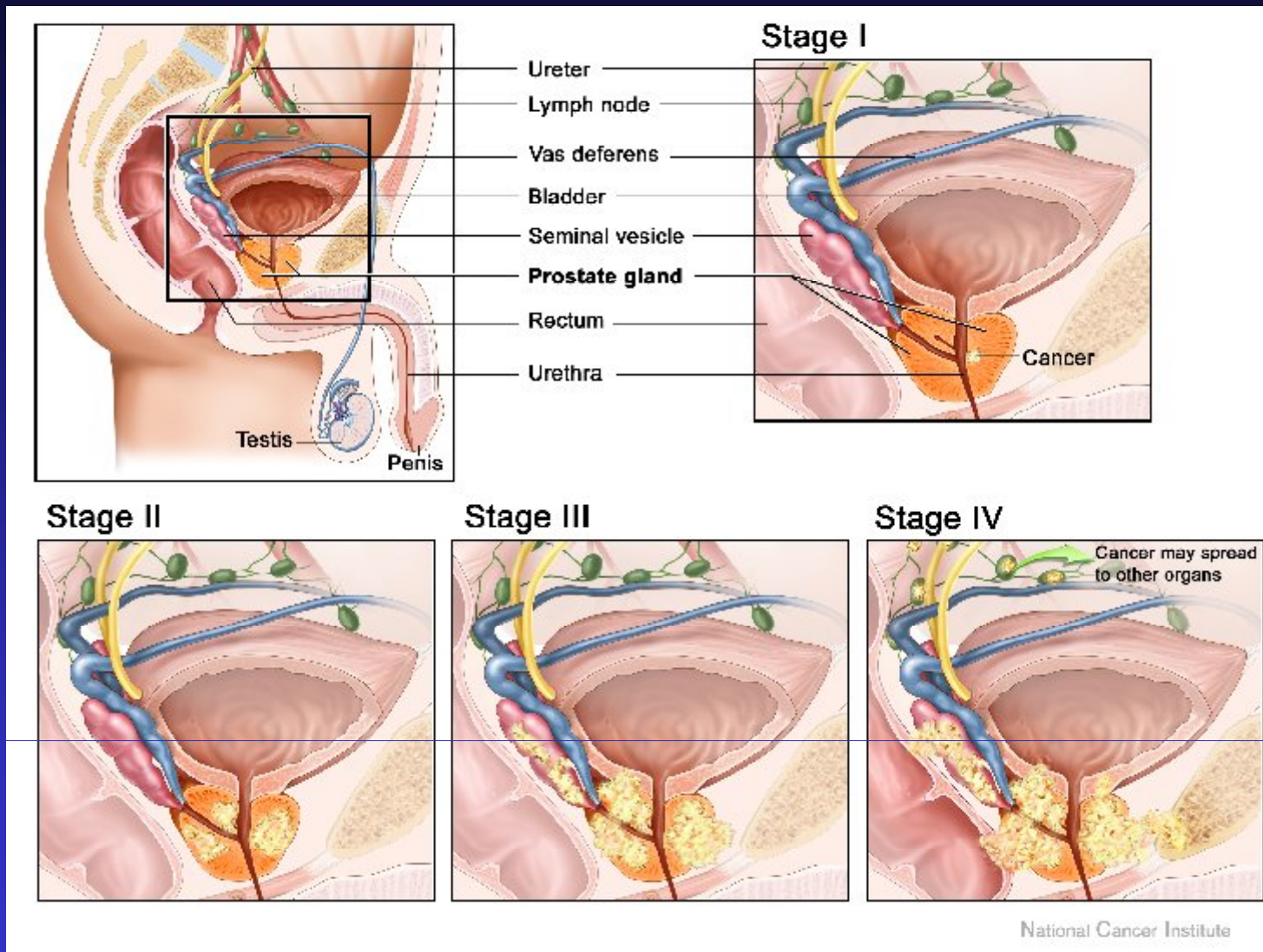
- Clinical Picture:
  - Asymptomatic:
    - PR, PSA
  - Symptoms:
    - LUTS ( Lower Urinary Tract Symptoms)
    - Hematuria
    - Symptoms of metastasis
    - Symptoms of uremia
  - Signs:
    - PR
    - Signs of metastasis or uremia
- Tumor markers: PSA, PAP
- Biopsy



# Pathology

- *Histology:*
  - Adenocarcinoma
  - Transitional Cell Carcinoma
  - Squamous Cell Carcinoma
  - Sarcoma (Rhabdomyosarcoma)
- *Grade:*
  - Gleason(1-10)
- *Level of Invasion*

# Staging



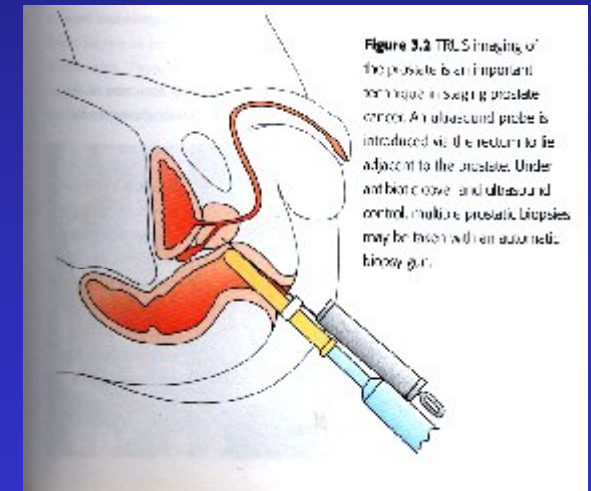
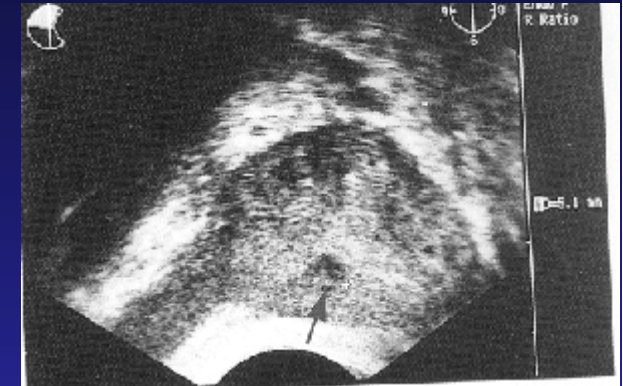
N= Lymph nodes  
M= Distant metastasis

# Metastasis

- L.N.
- Bone
- Liver
- Lung

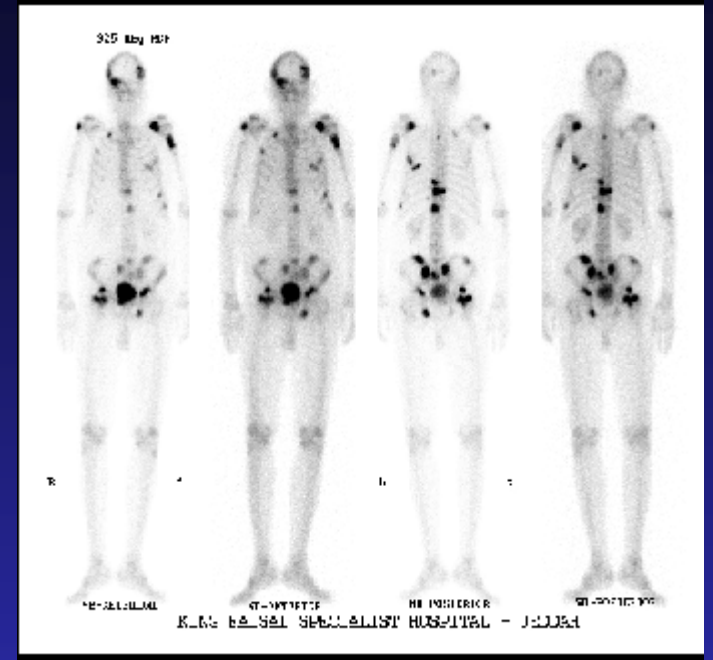
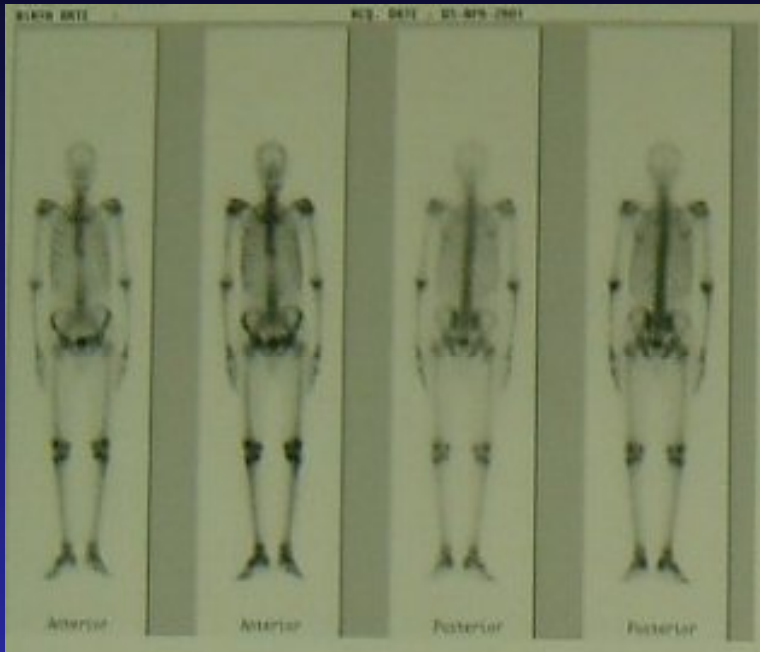
# Staging

- **TransRectal UltraSound (TRUS)**
- CT pelvis or MRI
- Bone scan or Skeletal survey
- Chest X-ray
- US liver





# Bone Scan



# Skeletal Survey



# Treatment

- *Localized:*
  - Radical prostatectomy
  - Radiotherapy
  - Brachytherapy
- *Metastatic:*
  - Palliative care
  - Hormonal treatment:
    - Orchiectomy, LH-RH agonist, estrogens, antiandrogens

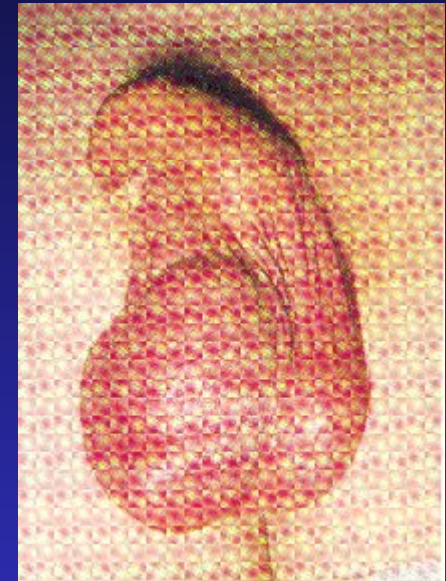
# Testicular Tumors

# Epidemiology

- Rare
- The most common malignancy in young male
- 20-40y
- Right > Left
- UDT= 40 times ( Surgery does not alter the malignant potential )

# Clinical Picture

- Symptoms:
  - Painless testicular mass
  - Hydrocele
  - Back pain
  - Dyspnea
  - Incidental
- Signs:
  - Testicular mass (separate from epididymis)
  - Not tender
  - Hydrocele
  - Abdomenal or neck mass

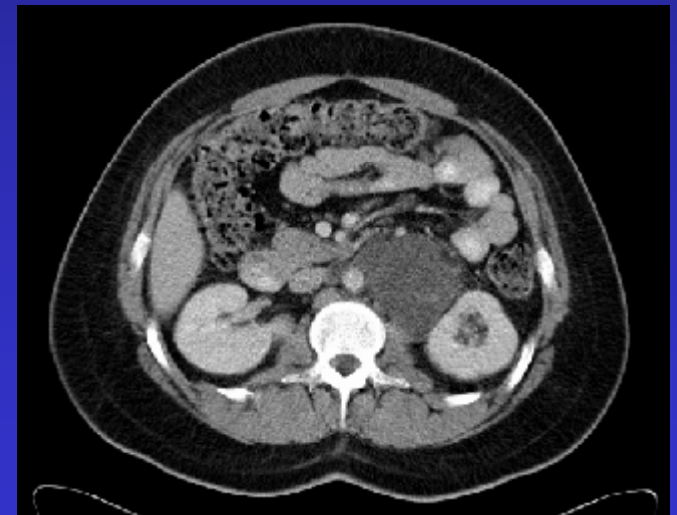
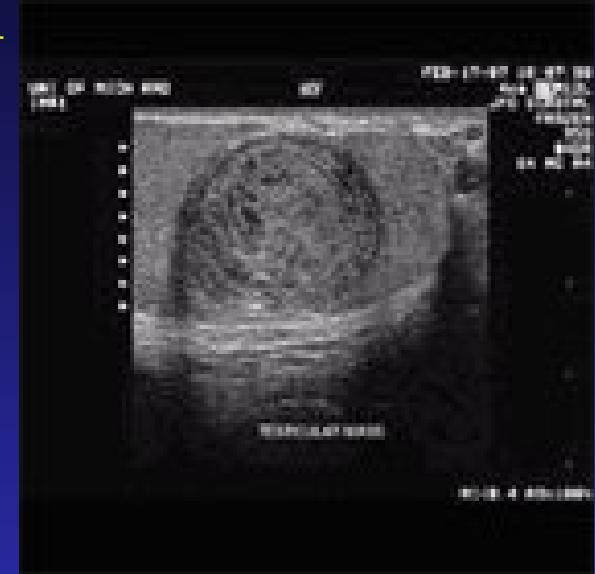


# Histology

- 1ry:
  - Germinal:
    - Seminoma
    - Nonseminoma:
      - Embryonal Cell Carcinoma
      - Teratoma
      - Choriocarcinoma
      - Yolk sac tumor
      - Mixed Cell Type
  - Nongerminial:
    - Leydig Cell, sertoli cell, gonadoblastoma
- 2ry: Lymphoma, leukemia

# Investigation

- **Laboratory:**
  - Renal profile
  - LFT
  - Tumor markers: B-HCG, alfa-fetoprotein
- **Radiological tests:**
  - Scrotal US
  - CT abdomen
  - Chest X-Ray



# Treatment

IF YOU SUSPECT TESTICULAR TUMOR:



**NEVER EVER TAKE A BIOPSY**  
**THROUGH THE SCROTUM**

# Testicular Tumor: Radical Orchiectomy

