Clinical Management of Biochemical Recurrence of Prostate Cancer

What to do when PSA rises after initial prostatectomy/radiation treatment

Presented by: Colorado Urology Prostate Support group

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Definition and Significance

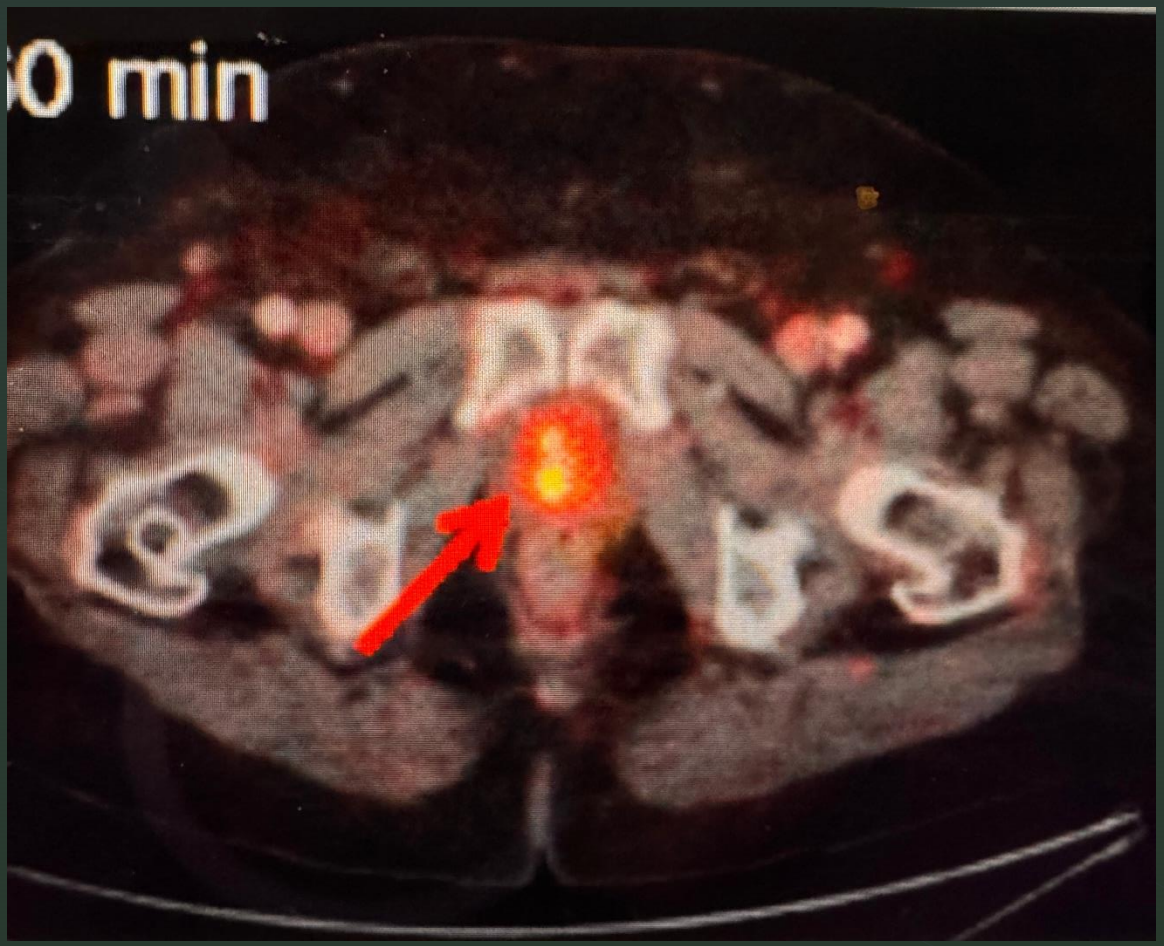
- Biochemical recurrence (BCR): Rising PSA after primary treatment (surgery or radiation), with no clinical or radiographic evidence of disease.
- Post-prostatectomy BCR: PSA > 0.2 ng/mL confirmed by a second reading
- Post-radiation BCR: PSA rise of 2 ng/mL above nadir
- Clinical importance: Indicates potential for disease progression

Risk Stratification

- Low-risk BCR:
  - PSA doubling time >12 months
  - Gleason score ≤6
  - Long interval to recurrence
- High-risk BCR:
  - PSA doubling time <10 months
  - Gleason score ≥7
  - Early recurrence post-treatment

Diagnostic Workup

- Confirm PSA rise
- History and physical exam
- Imaging (when appropriate)
  - PSMA PET/CT (preferred for high-risk BCR)
  - MRI pelvis for local recurrence
- Prostate biopsies for recurrence post primary radiation therapy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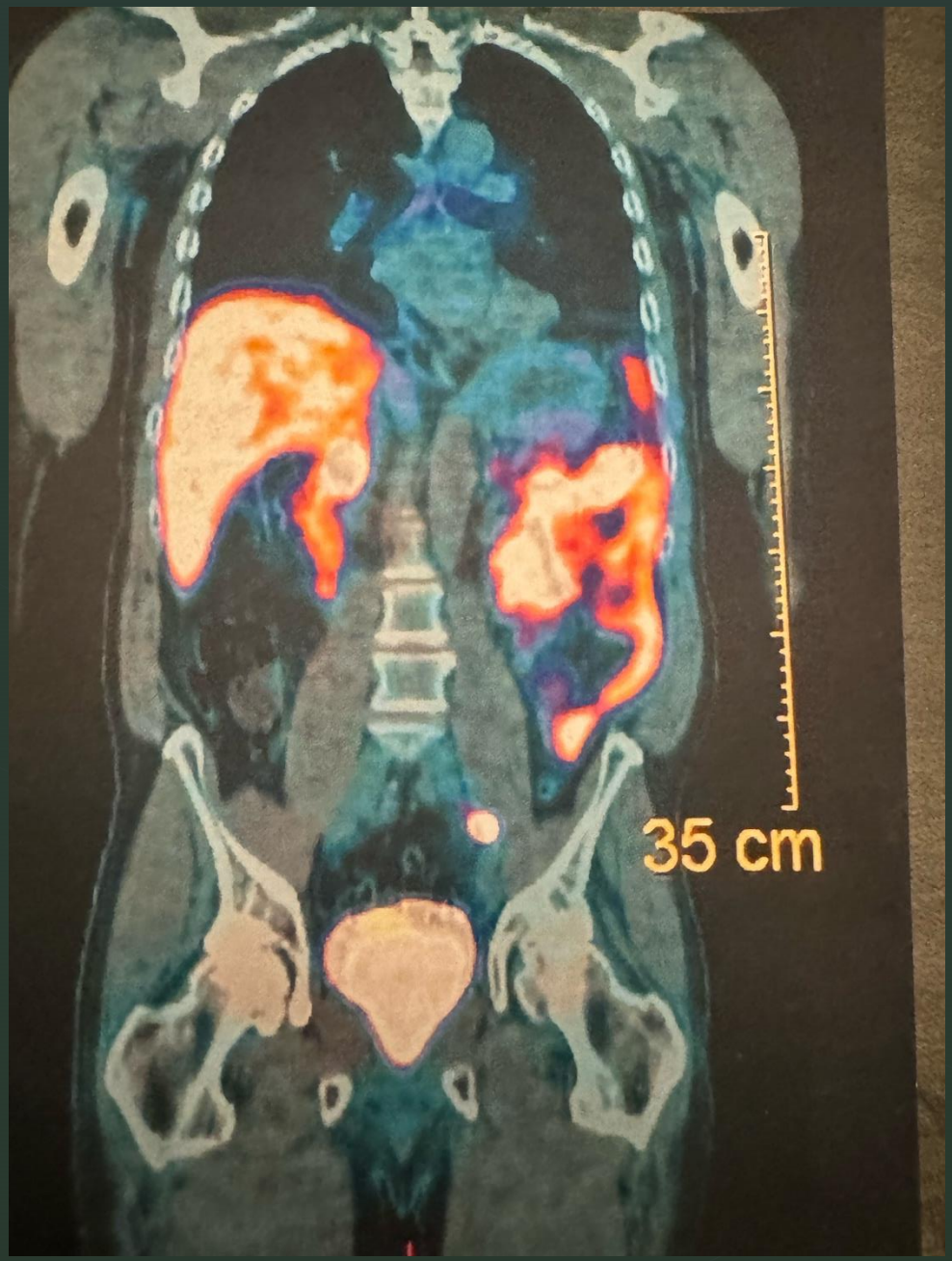
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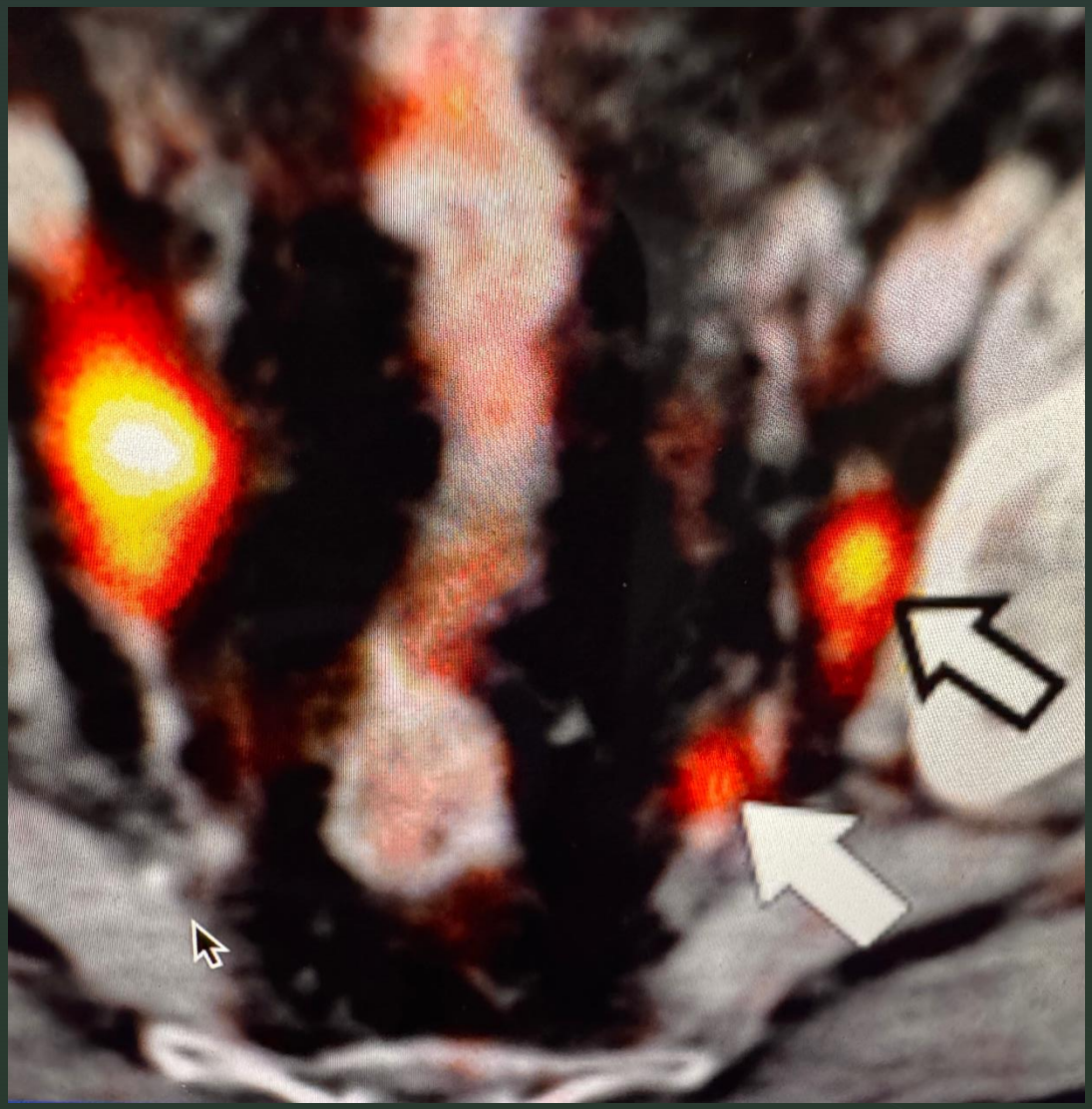

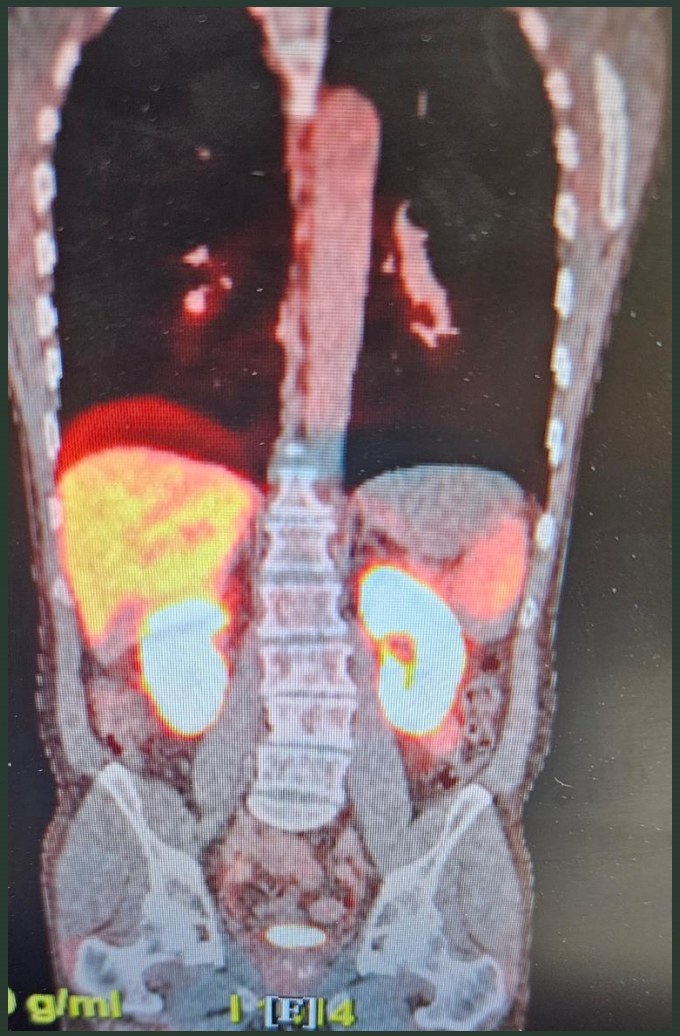
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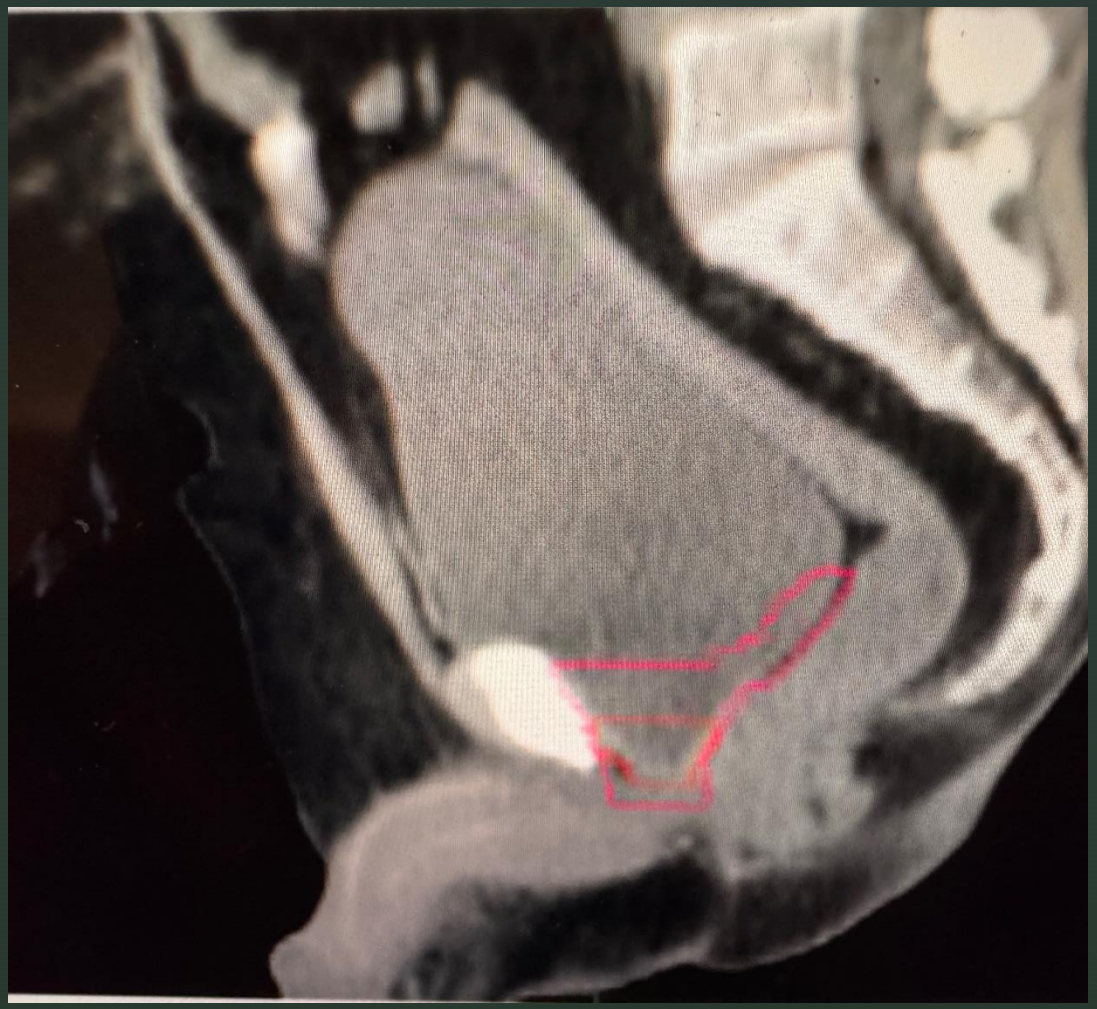
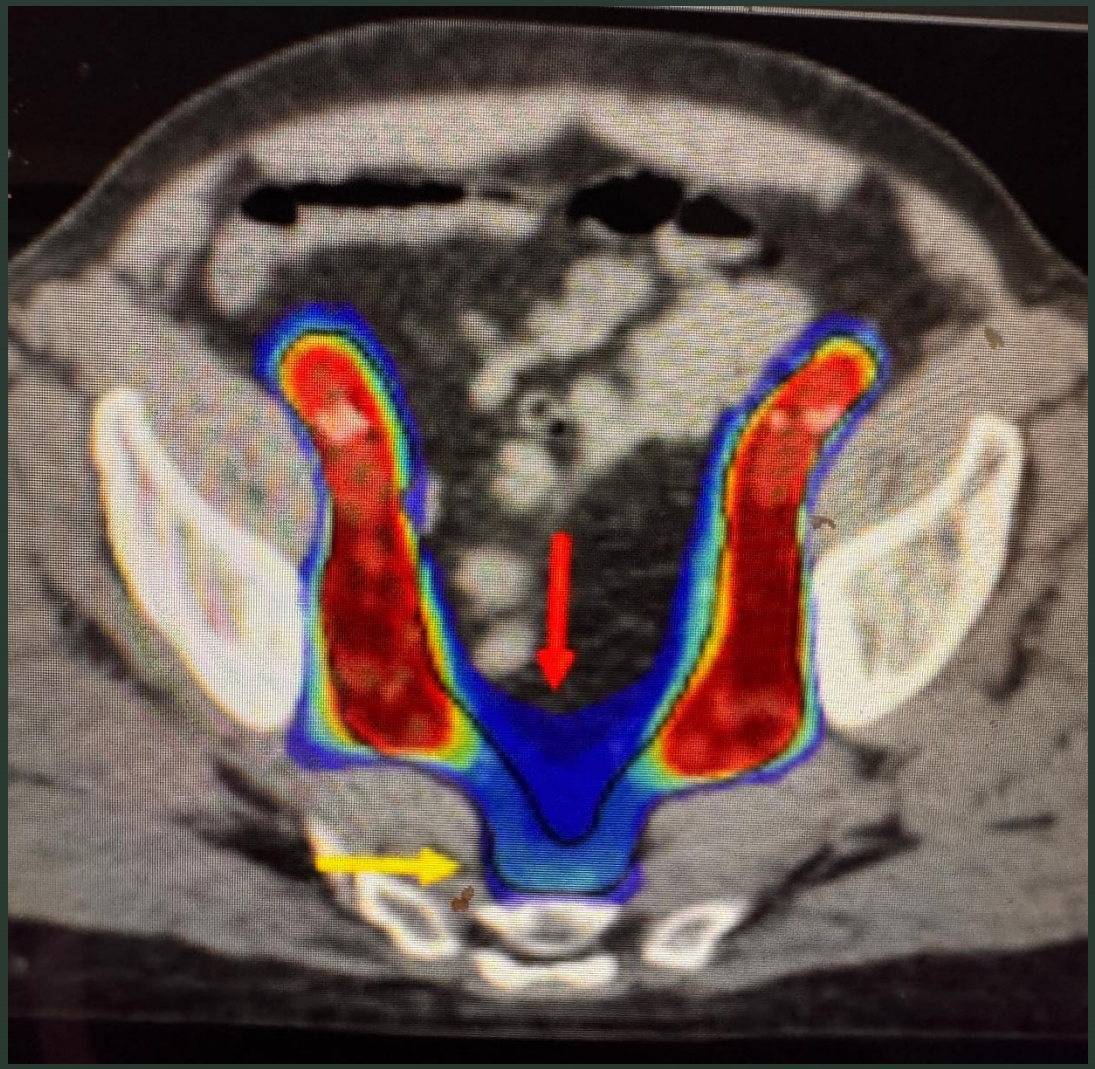
Salvage Treatment After Prostatectomy

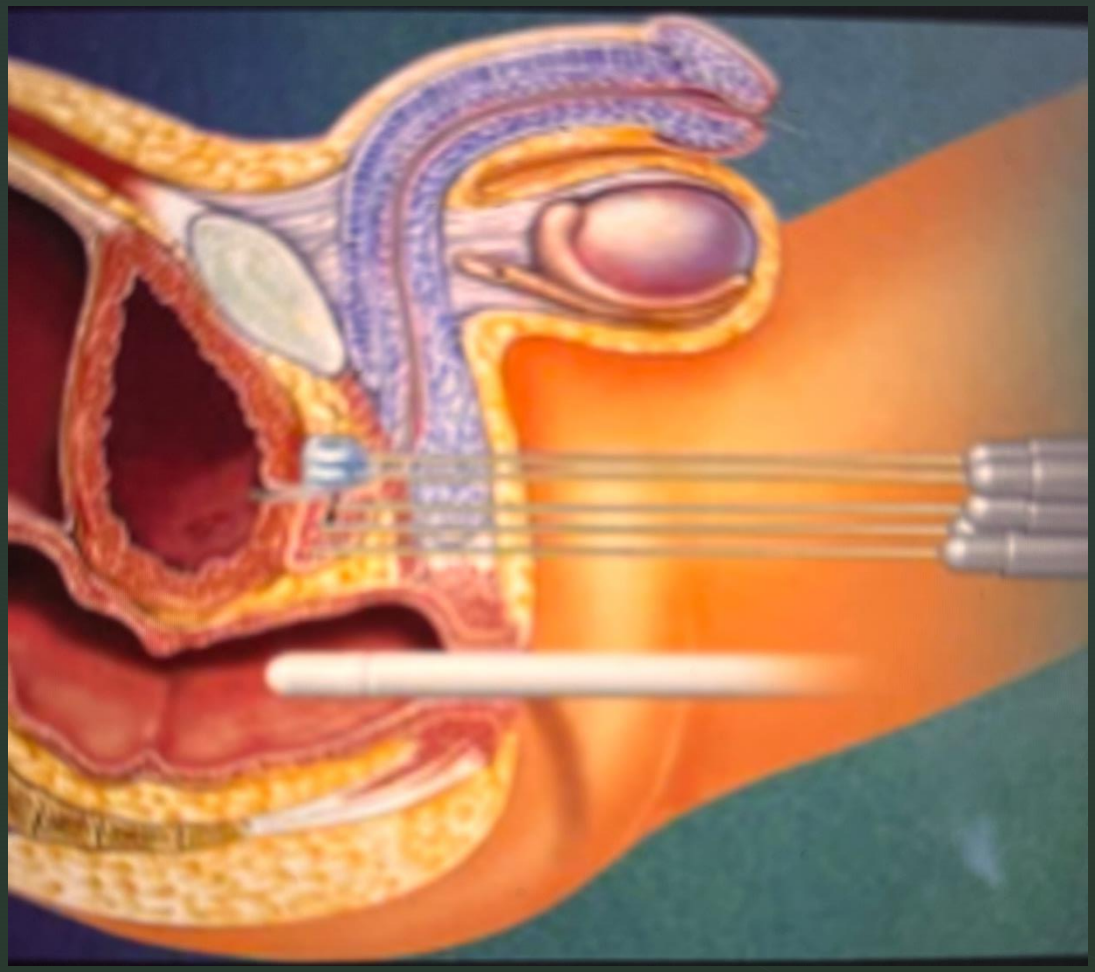
- Salvage Radiation Therapy (SRT):
  - Best for PSA <0.5 ng/mL
  - May improve progression-free survival
- +/- Androgen Deprivation Therapy (ADT):
  - Consider for high-risk features
- Observation for low-risk cases
- Consider MDT (SBRT/SABR) to low volume (oligometastatic sites)

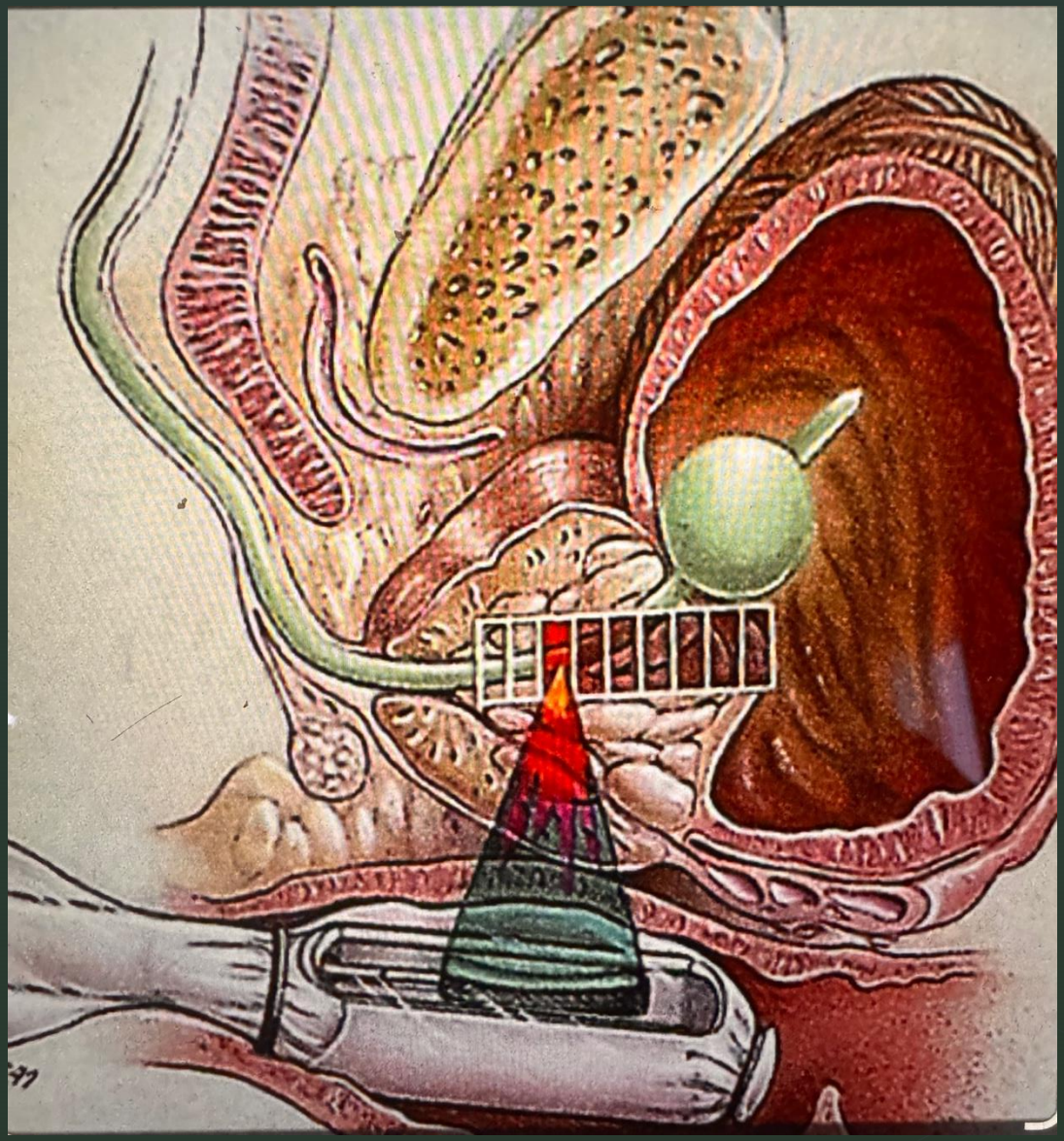


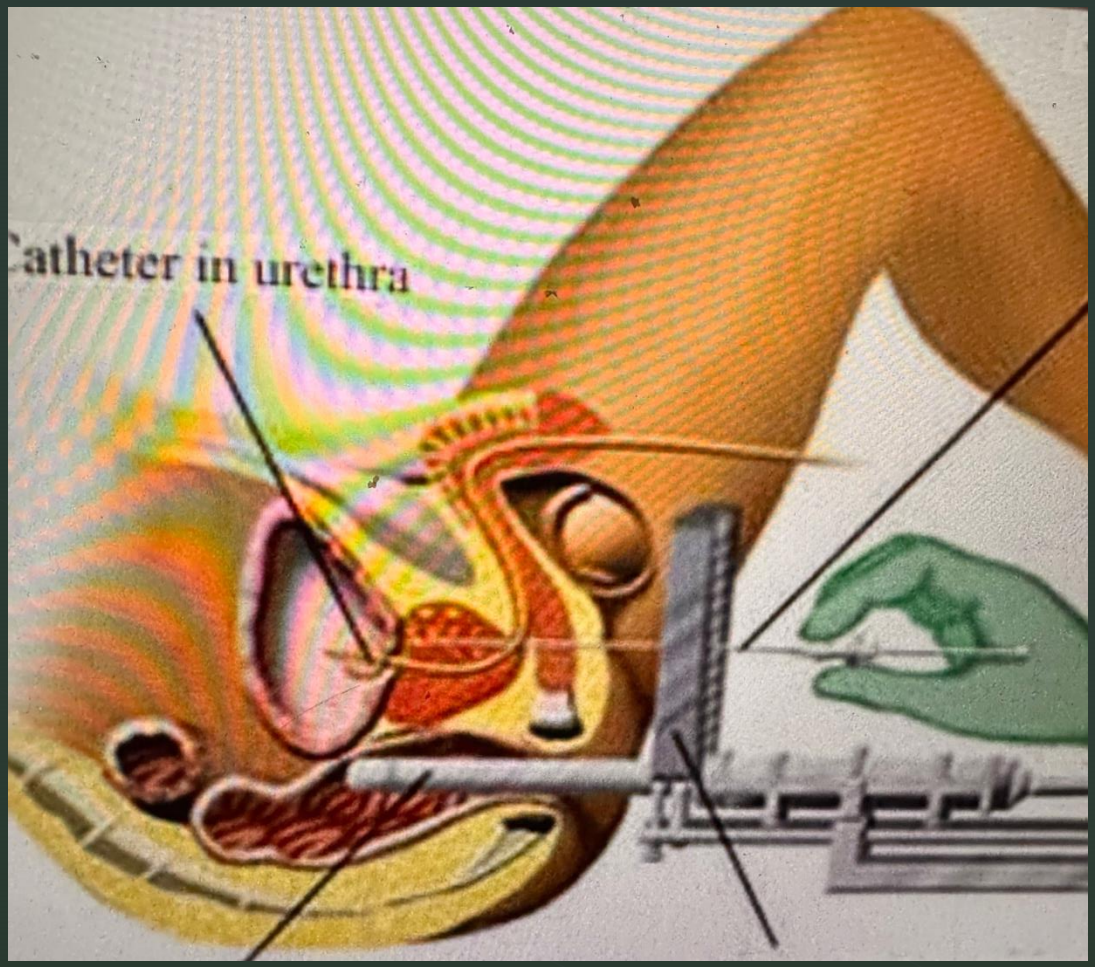


Management After Radiation Therapy

- Focal therapies (Cryotherapy, HIFU, PDT, RFA, FLA, IRE, Nanoknife)
- Regional Radiation therapy to Pelvis if not already radiated
- Consider MDT (SBRT/SABR) to low volume (oligometastatic sites)
- ADT: Intermittent or continuous depending on risk and symptoms



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Role of ADT

- Indications:
  - Rapid PSA doubling time
  - High Gleason score
  - Symptomatic or high-burden recurrence
- Types:
  - LHRH agonists/antagonists (Lupron/Orgovyx)
  - Antiandrogens (Xtandi, Erleada, Nubeqa, or Abiraterone/pred.)
    - Xtandi now approved for BCR as per Embark study criteria
- Intermittent vs continuous ADT

Use of Genetic Testing

- Genomic classifiers (e.g., Decipher) for risk prediction
- Germline and somatic genetic testing for high-risk individuals
- Important for potential future use of PARP inhibitors

Monitoring & Follow-up

- PSA every 3-6 months
- Repeat imaging as indicated
- Monitor for ADT side effects:
  - Bone loss
  - Metabolic syndrome
  - Cardiovascular risk

Summary

- BCR requires individualized risk-based approach
- Imaging and risk stratification guide therapy
- Salvage local therapy is curative in select cases
- ADT remains cornerstone in systemic disease
- Ongoing trials may refine future standards

Questions & Discussion

- Thank you!
- Questions?