Urinary obstruction in advanced prostate cancer

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Disclosures

- Advisory board
  - Janssen
  - Bayer
  - MSD
  - BMS

Practical approach

- Possible levels of obstruction
- Aims of intervention
- Methods and outcomes of intervention

Prevalence

- High incidence of nodal metastasis to pelvis and retroperitoneum in advanced prostate cancer

- N=30-50 cases of metastatic / advanced cancer per year
  - High prevalence of BOO or hydronephrosis

Levels of obstruction

- Ureteric
  - Retroperitoneal nodes
  - Trigonal invasion
- Bladder outlet

Ureteric obstruction

- Diagnosis – imaging guided
- Common dilemma in ureteric obstruction
  - Unilateral obstruction
    - Intervene or not
  - Bilateral obstruction
    - Intervene one or both sides
    - Which side first?

Unilateral obstruction

- Not symptomatic
- No clinical intent for chemotherapy
- Limited life expectancy 1 year or less

- Patient preference, perceived QoL from intervention

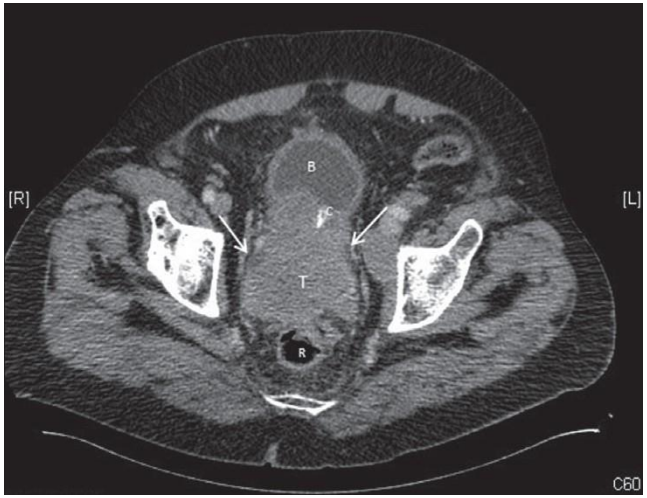
- May not intervene

Unilateral obstruction

- Nephrostomy preferred over retrograde stent insertion
  - LA
  - More expedient in those that are symptomatic (sepsis)
- Can allow antegrade insertion of stent
- Retrograde insertion possible
  - Difficult -> GA
  - Manipulation may trigger sepsis

To stent or not?

- Bulky pelvic disease
  - Urethral access is difficult
  - Cannot change stents
  - Divert urine away from hostile area



Choice of stents

- Polymeric stents
- Soft material
- Side holes allow urine flow
  - Can get encrusted
- Change via retrograde route is easy
- Better comfort profile

- Metallic stents
  - Resonance (Boston)
  - Less frequent change (12 months)
  - Discomfort

- Thermoexpandable memory stents
  - cost

Bilateral obstruction

- Drain the symptomatic side first
- Drain the side with better functional parenchyma

- Then consider the other in the clinical context

Bladder outlet obstruction

- Urethral catheter or SP catheter is most expeditious especially in ARU
- Consider channel TURP
  - Surgically fit
  - Desires short catheter time
- Select patient with cT3 disease in retention – RP

Channel TURP for BOO

- More efficacious than ADT alone to relieve BOO expediently
- Higher risk of incontinence (5%) and need for re-intervention compared to TURP for BPH
- Higher risk of initial failed TOC (up to 20%)
  - bulky disease
  - Neurological compromise

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Urology 1991;38:526–528.
J Urol 2002;167:5–9.

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Channel TURP for BOO

- Higher incidence of stress urinary incontinence after TURP and RT
- May have to delay RT until continence stabilises

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Bladder outlet obstruction

- Not suitable for TURP
  - Upfront ADT
  - 80-90% catheter free – 6 months
  - LHRH agonists, anti androgens, orchidectomy : no difference to catheter free time

  - Suprapubic catheter over urethral catheter
    - Comfort
    - Difficult urethral access

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Urology 1985;25:354–356
J Urol 1985;134:498–500.

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Summary

- Ureteric obstruction
  - Intervention should be clinically meaningful
  - Don't treat the scans alone!
  - PCN versus stents
- Bladder outlet obstruction
  - Channel TURP is efficacious but less so than TURP for BPH
  - ADT then TOC is possible with a longer catheter time