Urinary obstruction in advanced prostate cancer

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Disclosures

• Advisory board
  – Janssen
  – Bayer
  – MSD
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=50 cases of metastatic / advanced cancer per year
  – High prevalence of BOO or hydrenephrosis
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

Channel TURP for BOO

• Higher incidence of stress urinary incontinence after TURP and RT

• May have to delay RT until continence stabilises
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

Summary

• Ureteric obstruction
  – Intervention is in the clinical context of the patient
  – 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