POST PROSTATECTOMY URINARY INCONTINENCE (AND MALE INCONTINENCE)

Dan Wilby
The problem

Stress Urinary Incontinence (SUI)
‘….involuntary urinary leakage on effort or exertion or on sneezing or coughing….’

Less common in men but
An increasing problem
Surgical treatment for prostate cancer
>3000 cases per year
The problem

- RRP increasing
- SUI a well documented side effect
- What do we tell the patient?
  - What is incontinence??
  - Depends who you ask
  - What is the incidence?
  - Surgeon/approach
  - 0.8%-87% (older studies)
  - 2-10% at 1 year (that we know about)

- QOL
Study of post-RRP patients

Need to wear pads = greater problem than loss of sexual function

The problem

• Not only RRPé ..
• TURP
  • <1%
• Pelvic fracture ï up to 20%
• SCI
• Spina bifida
• AMS
The problem

Brachytherapy ï 0-45%
TURP after = high risk

Cryotherapy
Radiotherapy prior = risk factor

HIFU
A complex problemé

- Healthy and intact urothelium + urethral wall
- Functional smooth and striated muscles
- Correctly supported/positioned urethra
- Length of membranous urethra
- Nerve supply, detrusor/sphincter
- Prolapse of dorsal/posterior aspect of urethra
RRP

- Overall incontinence rates are decreasing
- Risk factors
  - Age
  - Prostate size
  - Co-morbidities
  - Nerve sparing?
  - Tumour stage
Pathogenesis

Operative
- Understanding of anatomy
- Preservation of NV bundles/bladder neck
- Seminal vesicle tip-sparing

Evidence only level 3
- (case series, case reports, expert opinion)
Pathogenesis

Pre-op
- Age
- Continence

Operative
- Technique
- Surgeon experience

Post-op
- Education/expectations
Diagnosis

Post Prostatectomy Incontinence

Initial Clinical Assessment
- Medical history incl. medication & co-morbidities
- Physical examination incl. rectal & sacral neurological examination
- Ultrasound for residual urine
- Urine analysis
- Incontinence questionnaire for subjective assessment, e.g. ICIQ-SF
- One hour pad-test

Initial Management

Stress Incontinence

Mixed Incontinence

Urge Incontinence

Lifestyle intervention
- Bladder Training
- Pelvic Floor Muscle Training

Failure

Antimuscarinics

Specialized Clinical Assessment
- Urodynamic
- Urethrocystoscopy

Sphincteric Incompetence

Surgical Treatment

Condition
Diagnostics
Therapy

© R.M. Bauer
Treatment: Non-invasive

- Within 0-12 months of surgery
- PFMT
  - Pre and post-op
  - Continence may return faster but no difference at 1yr
- Bladder training
- Timed voiding
- Reduction of fluids
- Reduction of stimulants

All recommended but not evidence based
Pharmacological treatment

**Duloxetine**
- SNRI
- Established in females
- Not licensed for use in males
- Nausea common SE
- 2 studies show improvement

**Anticholinergics**
- Early incontinence
- De novo urgency +/- DO
Surgical treatment

**Who?**
- Failure of conservative measures
- 6 months post RRP (1 year)
- SUI proven on UDS
- Cystoscopy

**How?**
- Many options
- Severity of symptoms
- Patient preference
- Availability
  - Chichester, Portsmouth
Surgical treatment

- 2-5% patients at 1yr
- Injection therapy
- Stem cell therapy
- Bone anchored slings
- Adjustable sling
- Functional retourethral sling (Advance)
- Pro-ACT
- Artificial urinary sphincter
Surgical treatment

- Stem cell therapy
- Bone anchored slings
- Adjustable sling
- Injection therapy
- Pro-ACT
- Artificial urinary sphincter
- Functional retrourethral sling (Advance)
Surgical treatment in EAU guidelines

- Bulking agents in mild to moderate
  - 50% early failure, effects decrease with time
- Pro-ACT
  - New, more evidence needed
- Male slings in mild to moderate
  - Success rates between 58% and 90%
- AUS is treatment of choice in moderate to severe
  - Success rates between 59% and 90%
Surgical treatment post EBRT in EAU guidelines

**AUS**
- Higher incidence of erosion/infection
- Can still be used

**Advance sling (not in guidelines)**
- 58% success
- Less dissection required
Quantification

Stamey

- Mild: Only with severe stress
- Moderate: Minimal stress incl walking
- Severe: Incontinence during bed rest

Pads

- Mild: 1 or 2/day <200ml/Day
- Moderate: 3-5/day 200-500/Day
- Severe: >5/day >500ml/Day
AUS

- Gold standard
- AMS 800
- 1972
- Moderate/severe
- Cognition and dexterity
- Cost
- Availability
Operative technique
Operative technique - dissection
Cuff sizing
Pump and PRB placement
Cuff insertion
Outcome data

- Continence (0-1 pad) - 59-87%
- Pad free - 10-72%
- Satisfaction - 87-90%
- 75% at 15 years have functioning device
Complications

- Mechanical failure
- Erosion
- Infection
- Urethral atrophy

Freedom from revision = 50% at 5 years
  - Explantation
  - Cuff downsizing
Advance Sling

• Newer technology
• Mild to moderate
• Trans-obturator
• Proximal relocation of bulbar urethra
• Only <3 year follow-up
Operative technique
Operative technique
Operative technique
Operative technique

Before sling

After sling
Outcome data

- Continence (0-1 pad)
  - 54-91%

- Pad free
  - 9-73%

- Satisfaction
  - High rates

- Only 2 year follow up
Complications

• Urinary retention 3-13%

• Perineal/adductor pain 2-4%
Take home messages

• SUI in men is increasing

• Conservative measures for 6 months

• Then consider surgery
Take home messages

- Surgical options
  - AUS
  - Male sling

- Specialist centres

- Good results with low morbidity
Thank You

ÆSuzie Venn

ÆPeter Guy

ÆAMS
Questions?

dpwurol@gmail.com

Suzie.venn@wsht.nhs.uk