Barnsley GP Update – rUTI and Female LUTs

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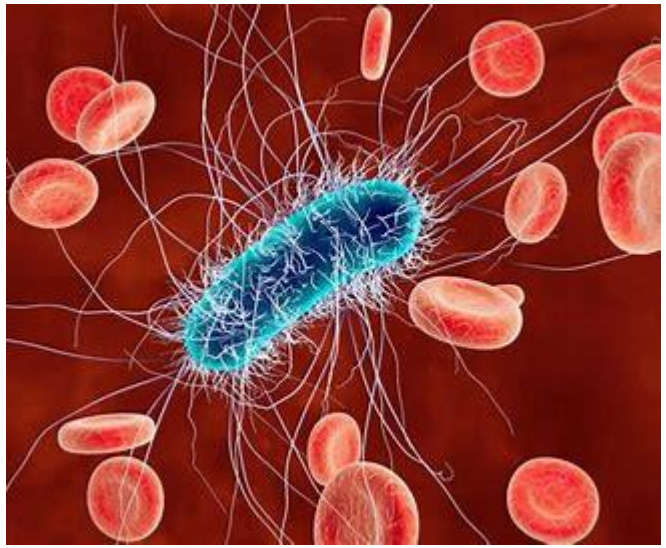
Recurrent UTIs

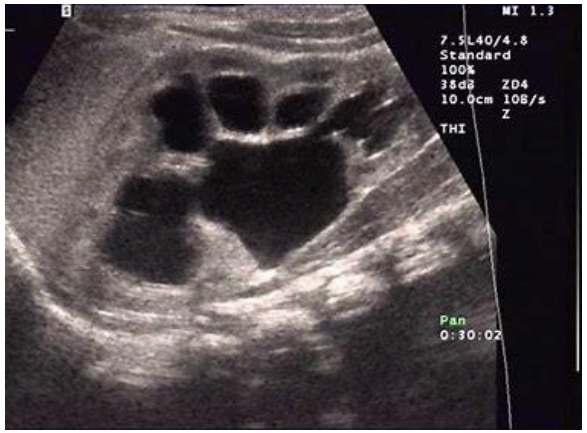
- Definition: two or more episodes of UTI in six months or three or more episodes in one year



- Risk Factors:
  - **In young and pre-menopausal women include:**
    - Sexual intercourse.
    - Past medical history of UTI in childhood.
    - Having a mother with history of UTI.
  - **In post-menopausal and elderly women include**:
    - History of UTI before menopause.
    - Urinary incontinence.
    - Atrophic vaginitis.
    - Cystocele.
    - Increased post-void urine volume.
    - Urine catheterisation and reduced functional status in elderly institutionalised women.

Investigation

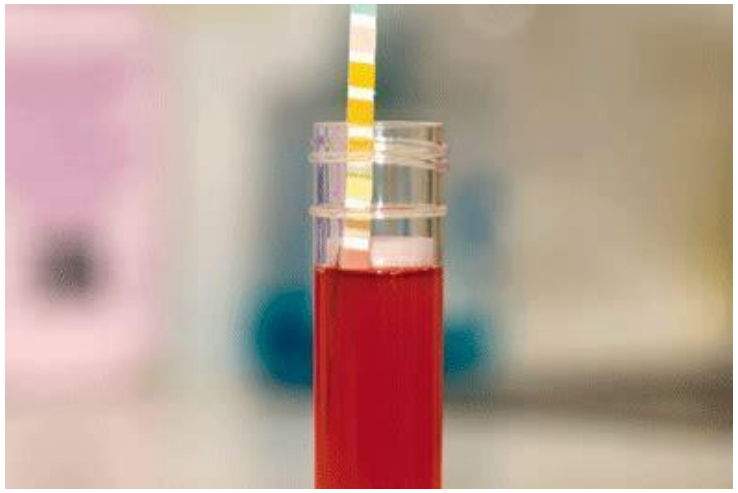
- History – dysuria, frequency and urgency; usually recovers with antibiotic use
- Must check for red flag symptoms and if patient meets the 2WW criteria
- Examination – palpable bladder, gynae masses



- Urinalysis and MSU
- US Renal tracts – post void residual measurement and any evidence of hydronephrosis

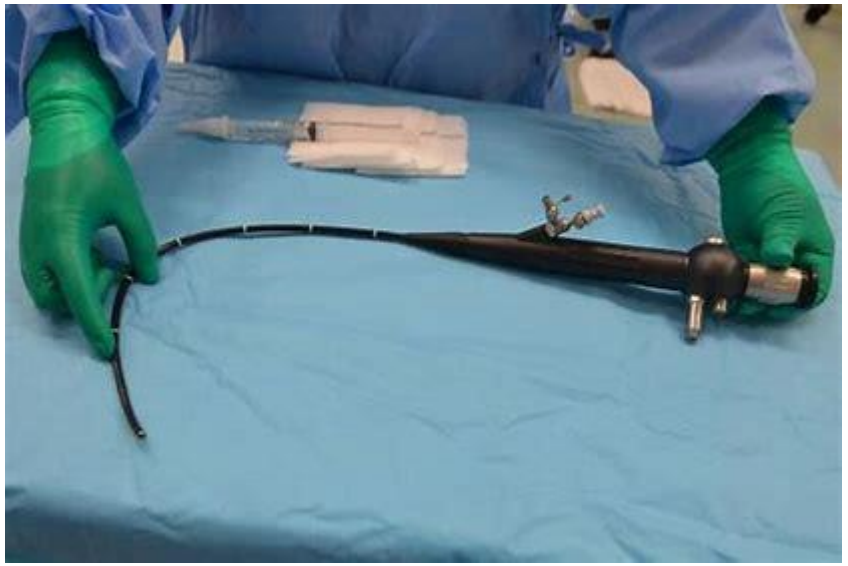
Patients who may require referral

- Male patients
- Female patients meeting 2WW criteria
- Female patients with a history of surgical treatment for stress incontinence/prolapse using mesh
- Unusual microbiology results
- Neuropathic patients
- Post void residual >100 ml

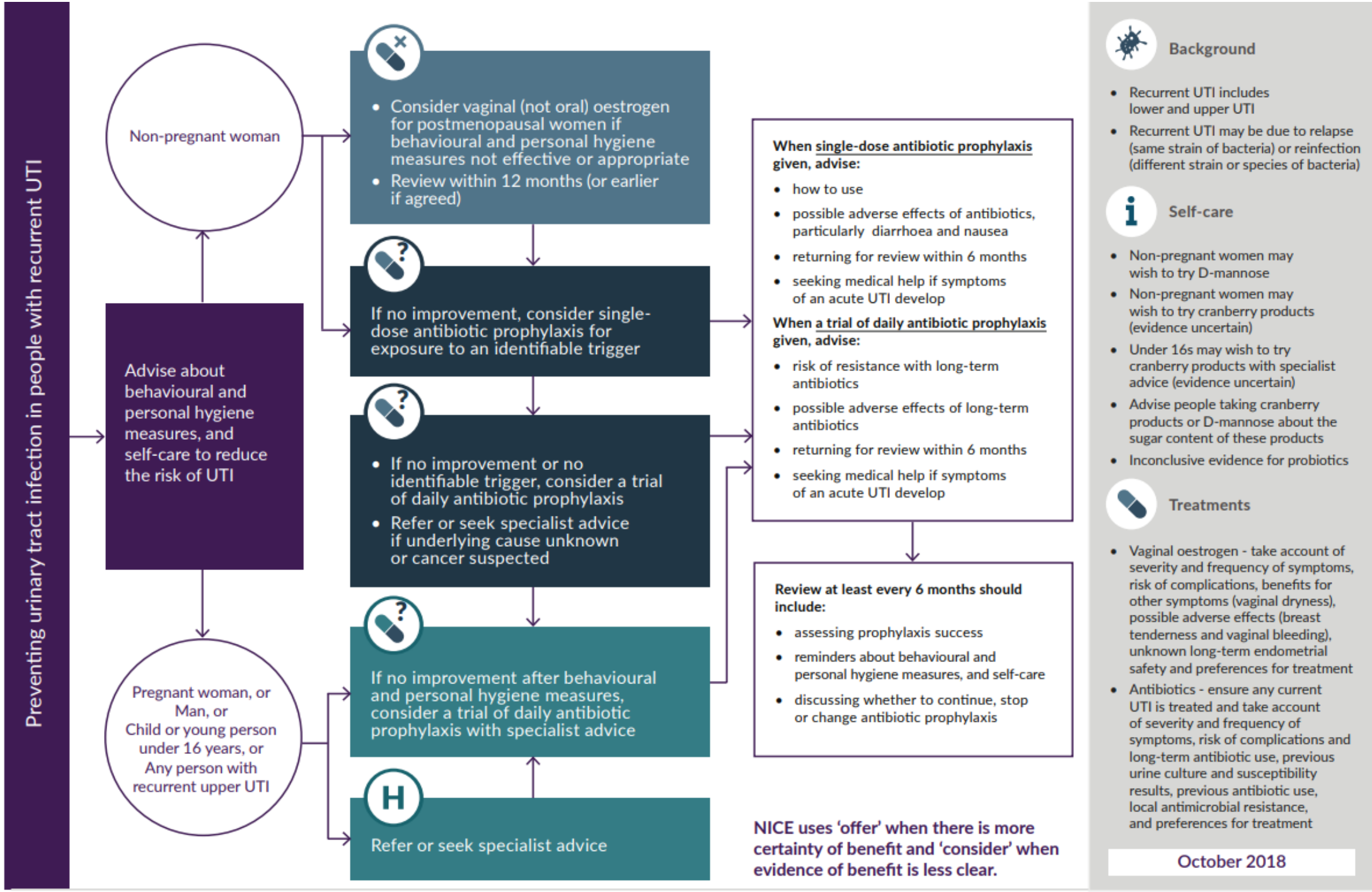


Does Flexible Cystoscopy have a role?

- Not as a routine investigation – very low diagnostic yield (<1.5%)
- Invasive procedure with risk of infection
- Indications: Patients meeting 2WW criteria, male patients, neuropathic patients



Preventing urinary tract infection in people with recurrent UTI



NICE uses 'offer' when there is more certainty of benefit and 'consider' when evidence of benefit is less clear.

Background

- Recurrent UTI includes lower and upper UTI
- Recurrent UTI may be due to relapse (same strain of bacteria) or reinfection (different strain or species of bacteria)

Self-care

- Non-pregnant women may wish to try D-mannose
- Non-pregnant women may wish to try cranberry products (evidence uncertain)
- Under 16s may wish to try cranberry products with specialist advice (evidence uncertain)
- Advise people taking cranberry products or D-mannose about the sugar content of these products
- Inconclusive evidence for probiotics

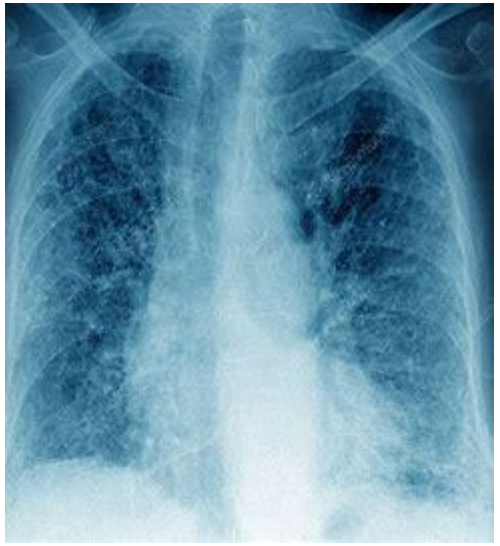
Treatments

- Vaginal oestrogen - take account of severity and frequency of symptoms, risk of complications, benefits for other symptoms (vaginal dryness), possible adverse effects (breast tenderness and vaginal bleeding), unknown long-term endometrial safety and preferences for treatment
- Antibiotics - ensure any current UTI is treated and take account of severity and frequency of symptoms, risk of complications and long-term antibiotic use, previous urine culture and susceptibility results, previous antibiotic use, local antimicrobial resistance, and preferences for treatment

October 2018

Which prophylactic antibiotic?

- MSU sensitivities are very helpful
- NICE guidelines: Trimethoprim or Nitrofurantoin first line; Amoxicillin or Cefalexin
- Cycling?
- Caution – long term use of nitrofurantoin can result in pulmonary fibrosis



Methenamine Hippurate

- Prescribe 1g BD PO
- Warn can cause upper GI discomfort on initiation but does settle with ongoing use
- Combine with Vit C supplementation to change urinary pH (stop cranberry!)
- Long-term safe medication – becomes less effective if LFTs deranged

thebmj Visual abstract

Non-antibiotic alternatives for treatment of urinary tract infections (UTIs)

Summary

Methenamine hippurate could be an appropriate non-antibiotic alternative to prophylactic antibiotics for women with recurrent UTIs, informed by patient preferences and antibiotic stewardship

Study design

Randomised non-inferiority trial | Open label | Recruited women from eight centres across the UK

Population

240 adult women with recurrent UTIs requiring prophylactic treatment

- Median average 6 UTIs in 12 months before trial entry in both groups
- Peri-/post-menopausal: 59%
- Average age: 50 years

Comparison

Experimental

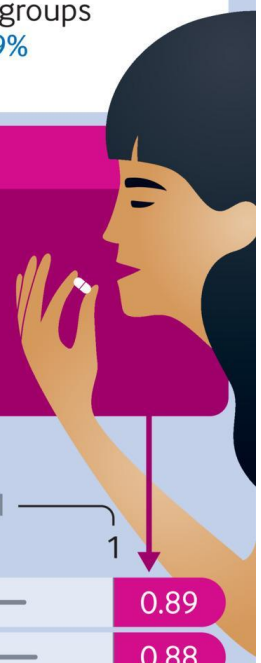
Methenamine hippurate
Taken twice daily for 12 months

120

Control

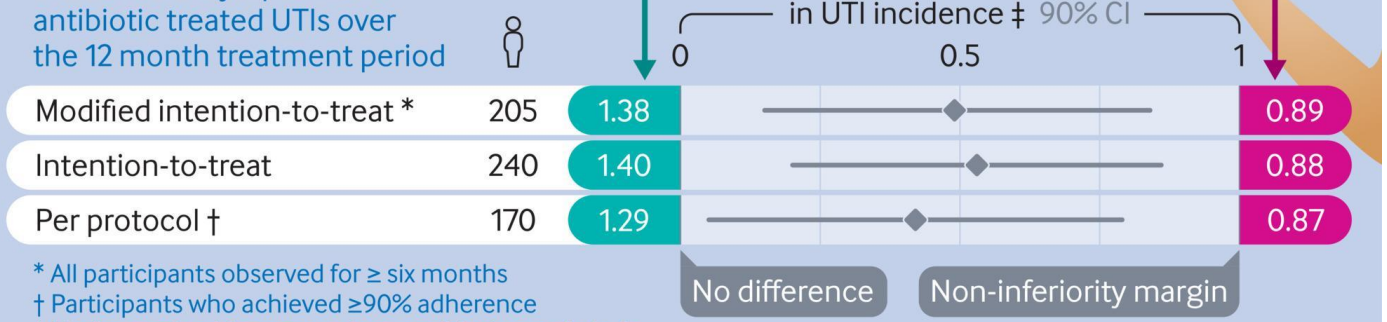
Antibiotic prophylaxis
Nitrofurantoin, trimethoprim, or cefalexin taken daily for 12 months

120



Outcomes

Incidence of symptomatic, antibiotic treated UTIs over the 12 month treatment period



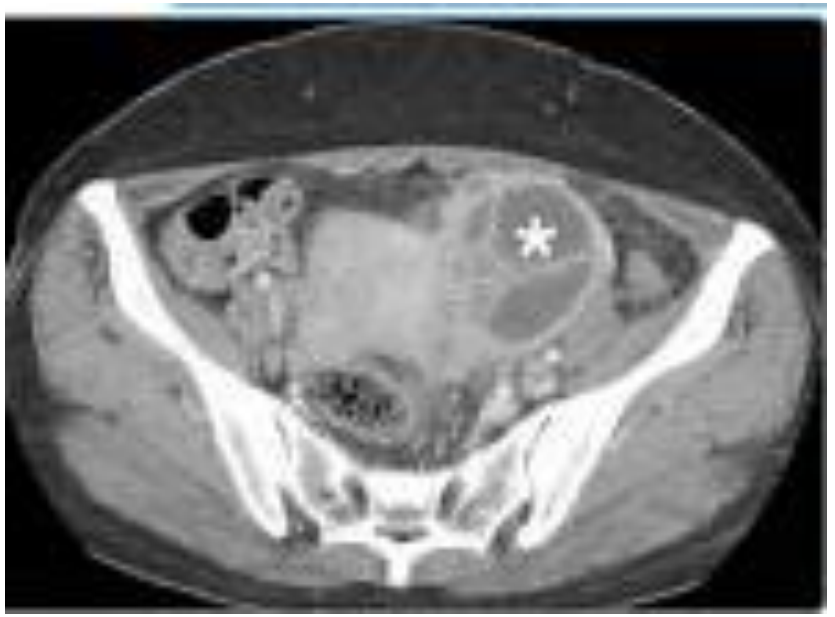
* All participants observed for ≥ six months
† Participants who achieved ≥90% adherence
‡ Methenamine hippurate minus antibiotic prophylaxis

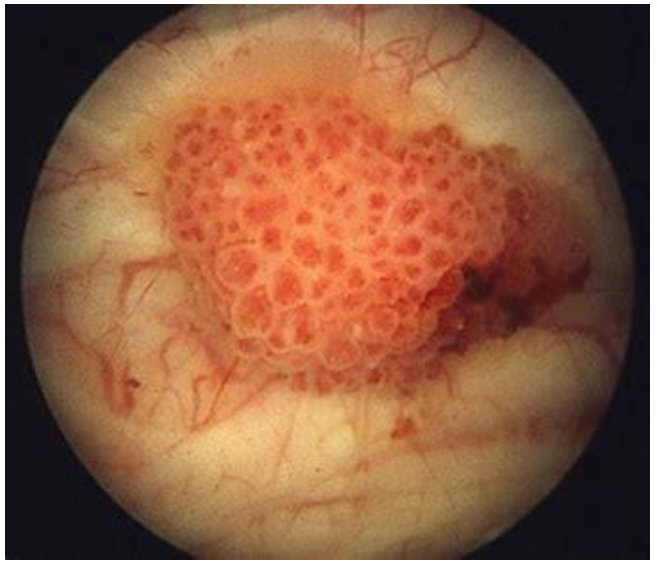
https://bit.ly/bmj-altar

Pitfalls

Is it really recurrent UTI?

- Negative MSUs
- Visible Haematuria
- Gynae pathology
- Symptoms not settling with antibiotics





Female LUTs

- OAB – symptom complex of urinary urgency, usually with urinary frequency and nocturia, with or without urgency urinary incontinence
- Stress Incontinence - involuntary loss of urine on effort or physical exertion (e.g sporting activities) or on sneezing or coughing
- Mixed Incontinence
- Voiding Dysfunction - abnormally slow and/or incomplete micturition

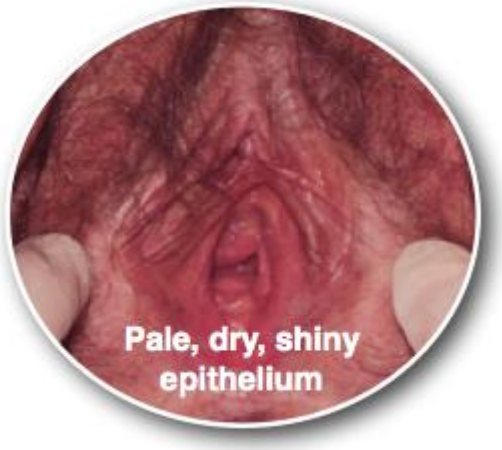
Initial Assessment

History

- Characterise symptoms as storage or voiding symptoms
- Gynae History - endometriosis
- Red Flags – neurological symptoms, visible haematuria, persistent bladder pain, previous interventions for incontinence

Examination

- Abdominal - ?palpable bladder
- PV - ?gynae masses or evidence
  of prolapse
  - atrophic vaginitis

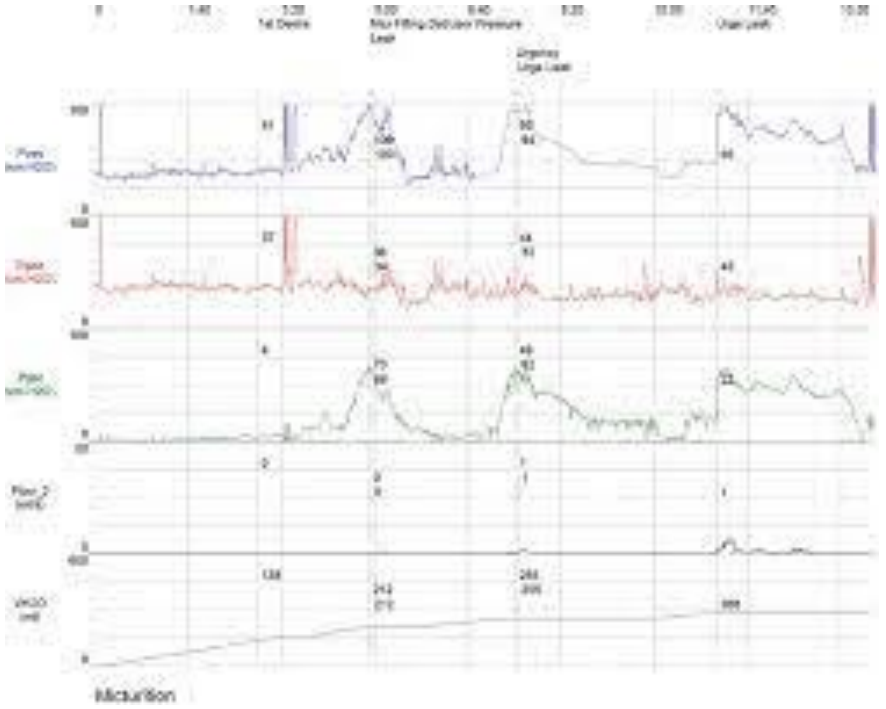


OAB - Management in Primary Care

- Lifestyle modifications
  - Reduce/Cut out caffeinated drinks/fizzy drinks
  - Weight loss
  - Reduce alcohol intake
- Anticholinergic
- Mirabegron
- Consider topical vaginal oestrogen in post-menopausal women

When to refer and what do we do?

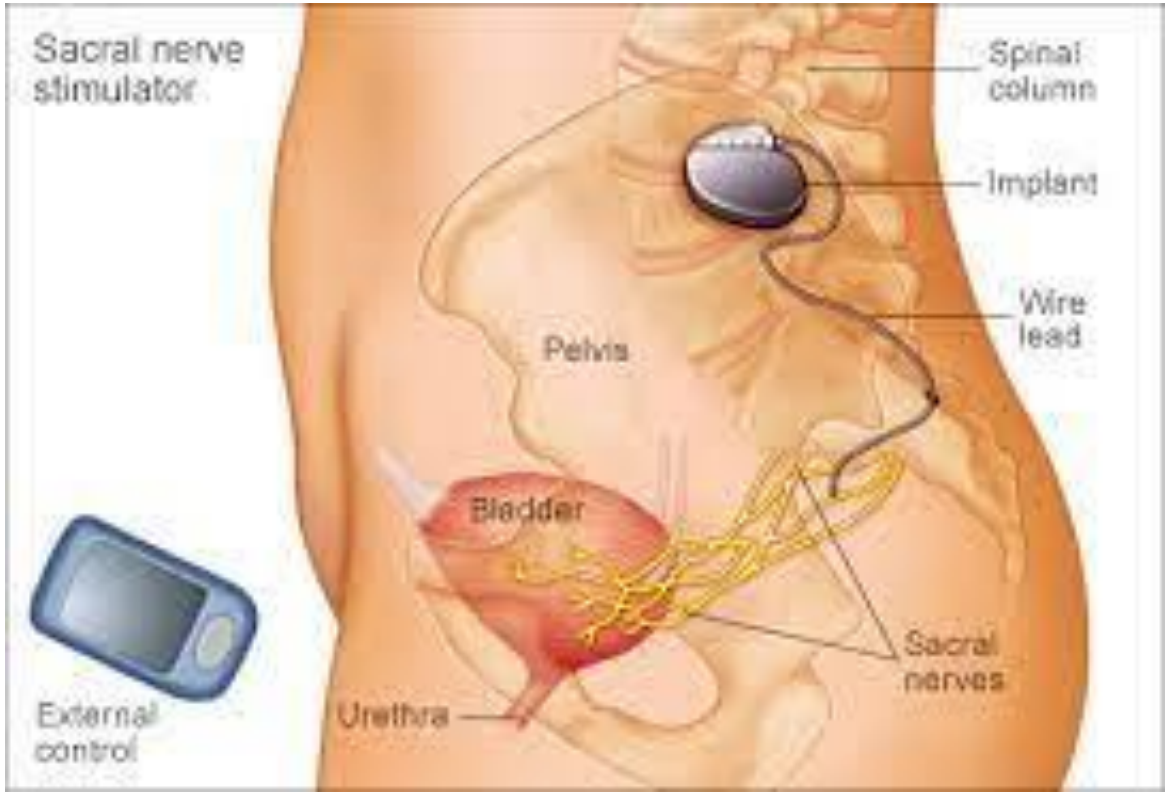
- Refer if symptoms refractory to lifestyle modifications and pharmacology and patient fit/willing for further intervention
- Urodynamics to confirm detrusor overactivity
- Onabotulinum toxin A (available BDGH/MidYorks)
- Sacral Neuromodulation (available MidYorks)



Sacral Neuromodulation

- Two Stage Procedure:

- PNE – test phase, temporary lead placement and assessment over 3 weeks
- If successful apply for funding and list for permanent implant



Stress Urinary Incontinence – Primary Care

- Lifestyle Modifications
  - Weight loss
  - Stop smoking
  - Impact of other conditions (e.g. COPD)

- If there is an overactive component to incontinence treat as for OAB

- Continence team referral – pads assessment and management of vulval health

- Topical vaginal oestrogen in post-menopausal women

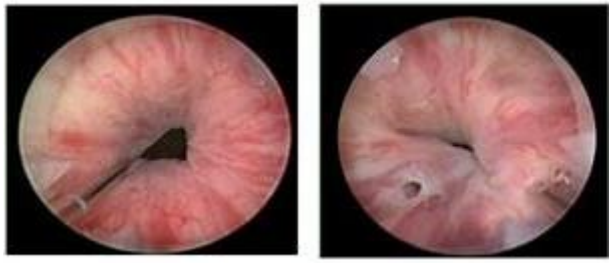
When to refer and what do we do?

- Refer women with stress incontinence refractory to lifestyle modifications or those with recurrent stress incontinence or those with mixed incontinence who are fit for surgical intervention
- Referral for supervised pelvic floor exercises by physiotherapists
- Urodynamics
- Flexible cystoscopy if previous mesh surgery
- Offer surgical treatment

Surgical Options

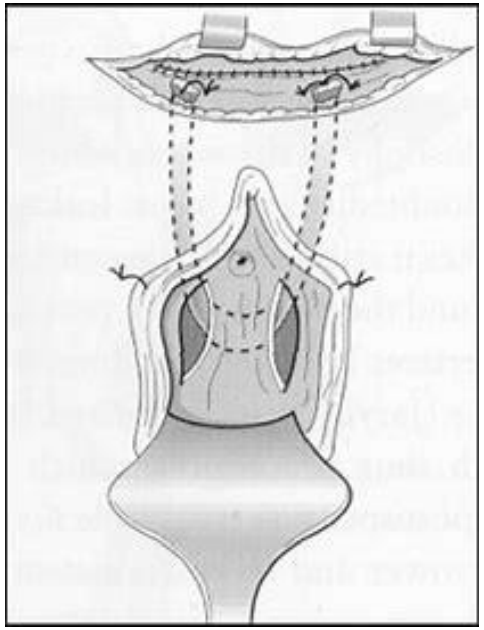
Urethral Bulking

- Minimally invasive
- Coaptation of urethra
- May need recurrent treatment



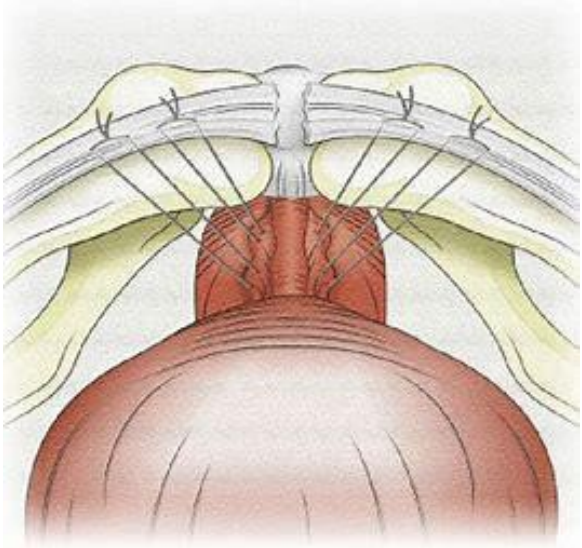
Autologous Fascial Sling

- Rectus Fascia used as a sling support



Burch Colposuspension

- Sutures used to lift paravaginal tissue to Cooper's ligament



Voiding Dysfunction in Women

- Women with straining to void, raised post void residuals, episodes of acute urinary retention, recurrent infections
- Need to rule out reversible causes (constipation and medication) and to check for red flag symptoms (new neurological symptoms, gynae masses)
- Difficult condition to manage
- Treatment options – Intermittent self-catheterisation, indwelling catheter (SPC) or sacral neuromodulation

Pitfalls

- Failure to recognise red flag symptoms (particularly neurological symptoms)
- Recognition of previous surgical intervention for stress incontinence (particularly mesh procedures)
- Consider management of prolapse
- Consider vulval health

Thank you!