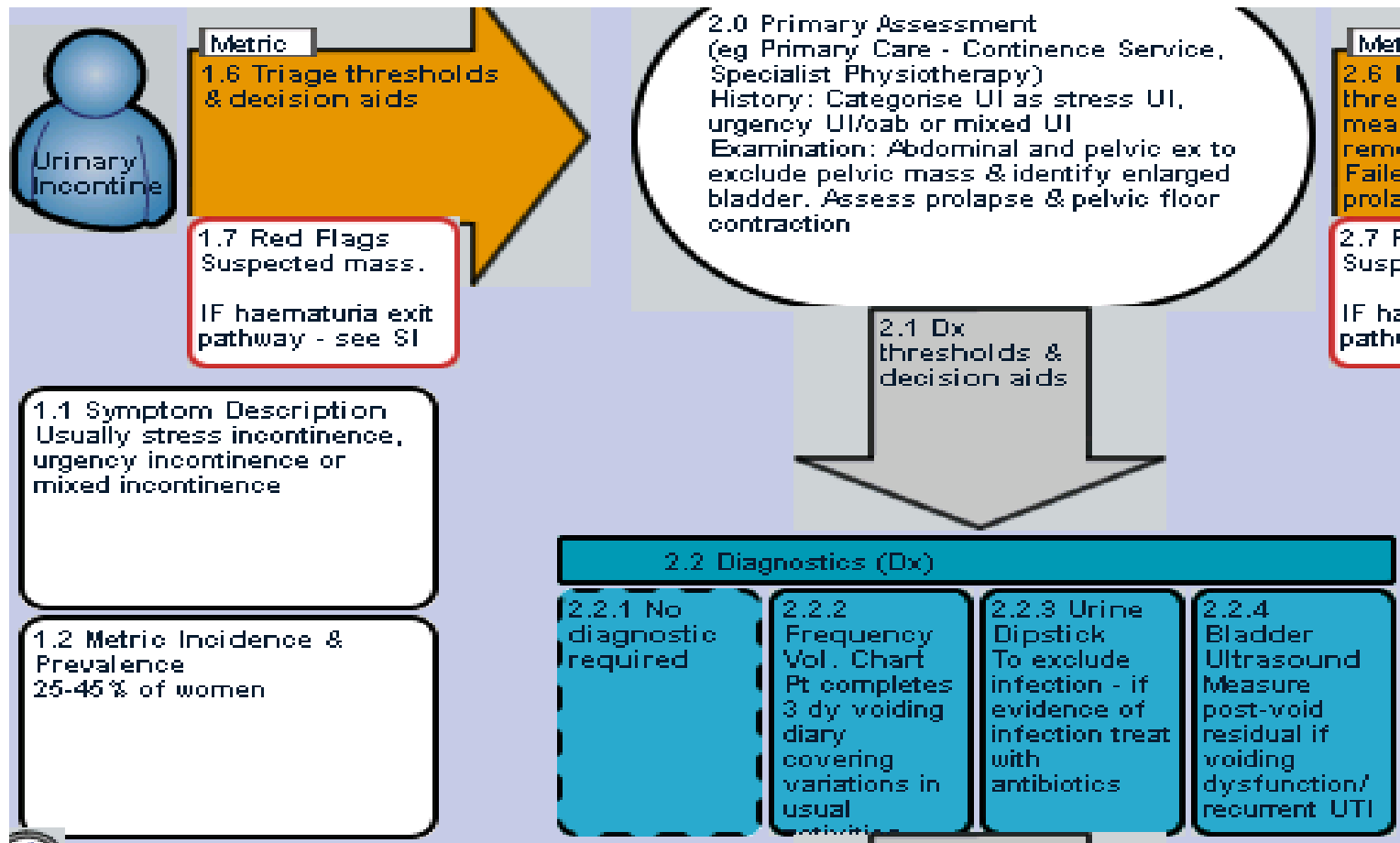


# Update on Management of Stress Urinary Incontinence and Referral Pathway

**Mr Roland Morley**

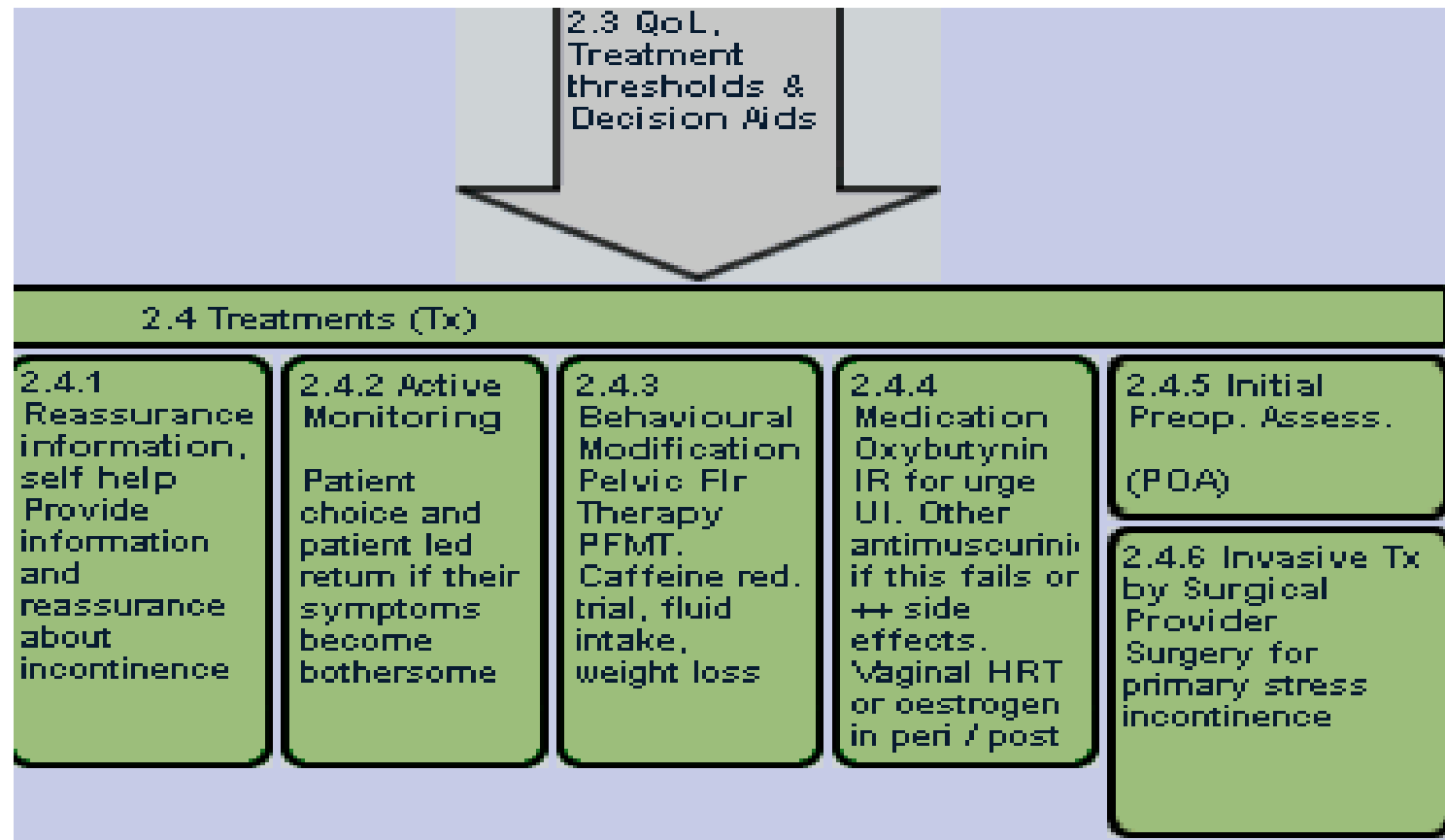
Consultant Urologist  
Department of Urology

# Urinary Incontinence Primary Care Assessment

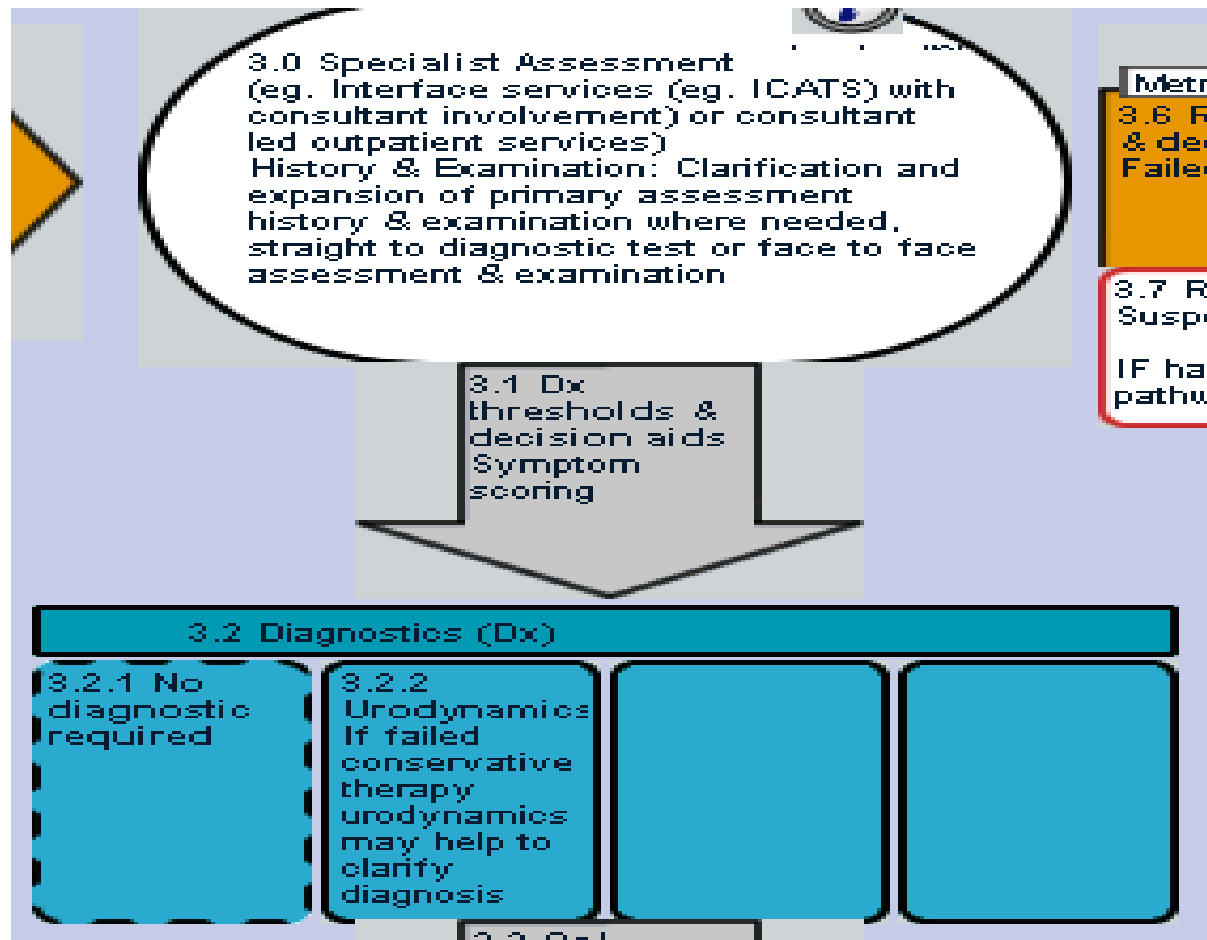


# Urinary Incontinence

## Primary Care Treatment



# Urinary Incontinence Specialist Assessment



# Urinary Incontinence Specialist Treatment

3.3 QoL,  
Treatment  
thresholds &  
Decision Aids



## 3.4 Definitive Treatments (Tx)

3.4.1  
Reassurance  
information,  
self help  
Provide  
information  
and  
reassurance  
about  
incontinence

3.4.2 Active  
Monitoring  
Patient  
choice

3.4.3  
Behavioural  
Modification  
Pelvic Floor  
Therapy  
Specialist  
PFMT &  
bladder  
training.  
Biofeedback  
& electrical  
stimulation

3.4.4  
Medication  
Anticholinergic  
drugs.  
Duloxetine  
for stress  
UI. vaginal  
oestrogens in  
post meno  
women with  
OAB &  
atrophic

3.4.5 Preop.  
Assess.  
(POA)

3.4.6 Invasive Tx  
by surgical  
~~procedures~~  
for  
primary stress  
incontinence

## UI in Primary Care

**9 - 47% sufferers seek professional help**

25% reported ineffective ways of dealing  
with the problem

75% unaware that drug treatment is available

**46% of UI patients suffer for 5 years or more before  
presenting to a GP**

Further investigation  
or  
empirical treatment ?

# Empirical therapy

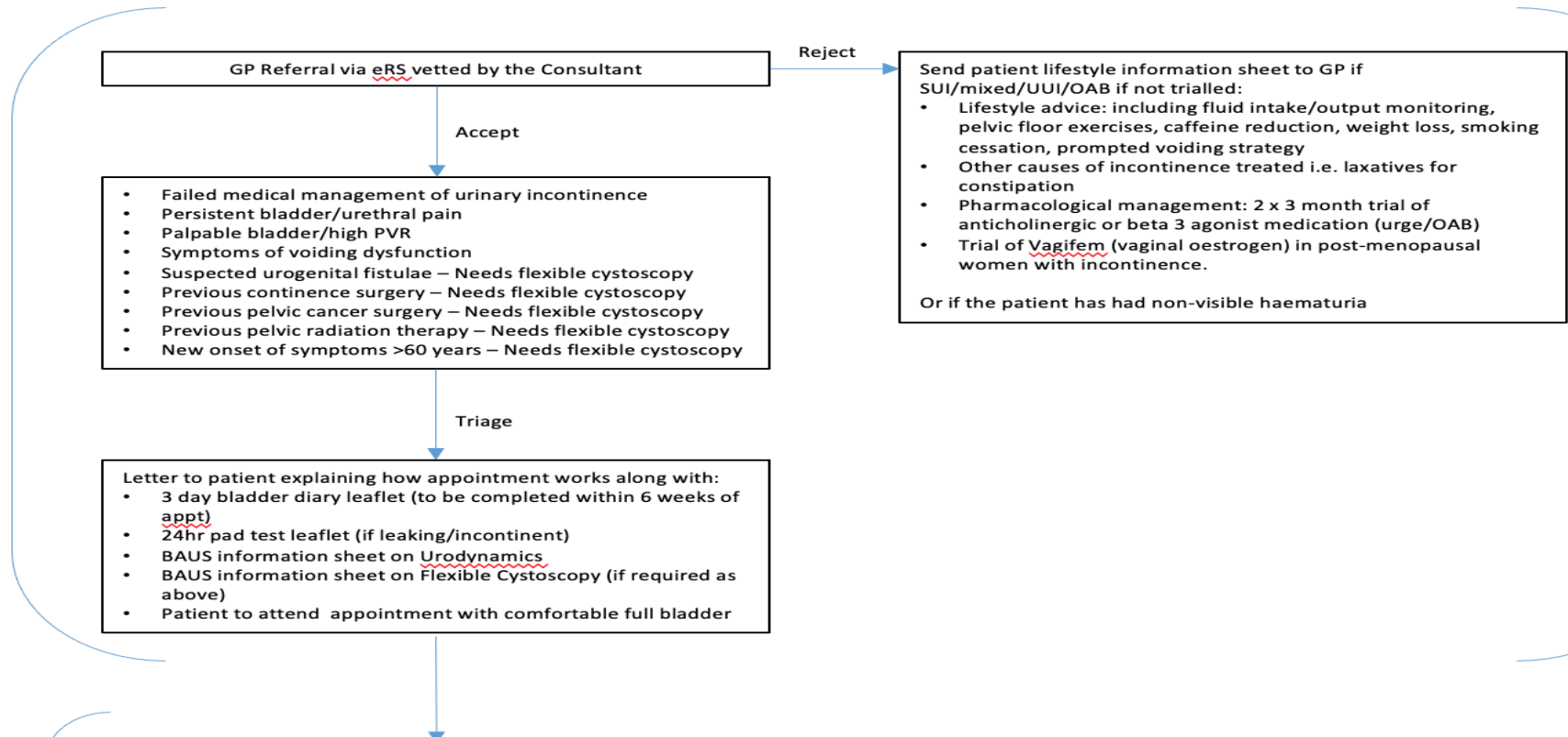
Blood, rec UTIs, suspected neuropathy must be investigate  
otherwise empirical therapy is justified

If empirical therapy fails

Cystoscopy is more important than urodynamics

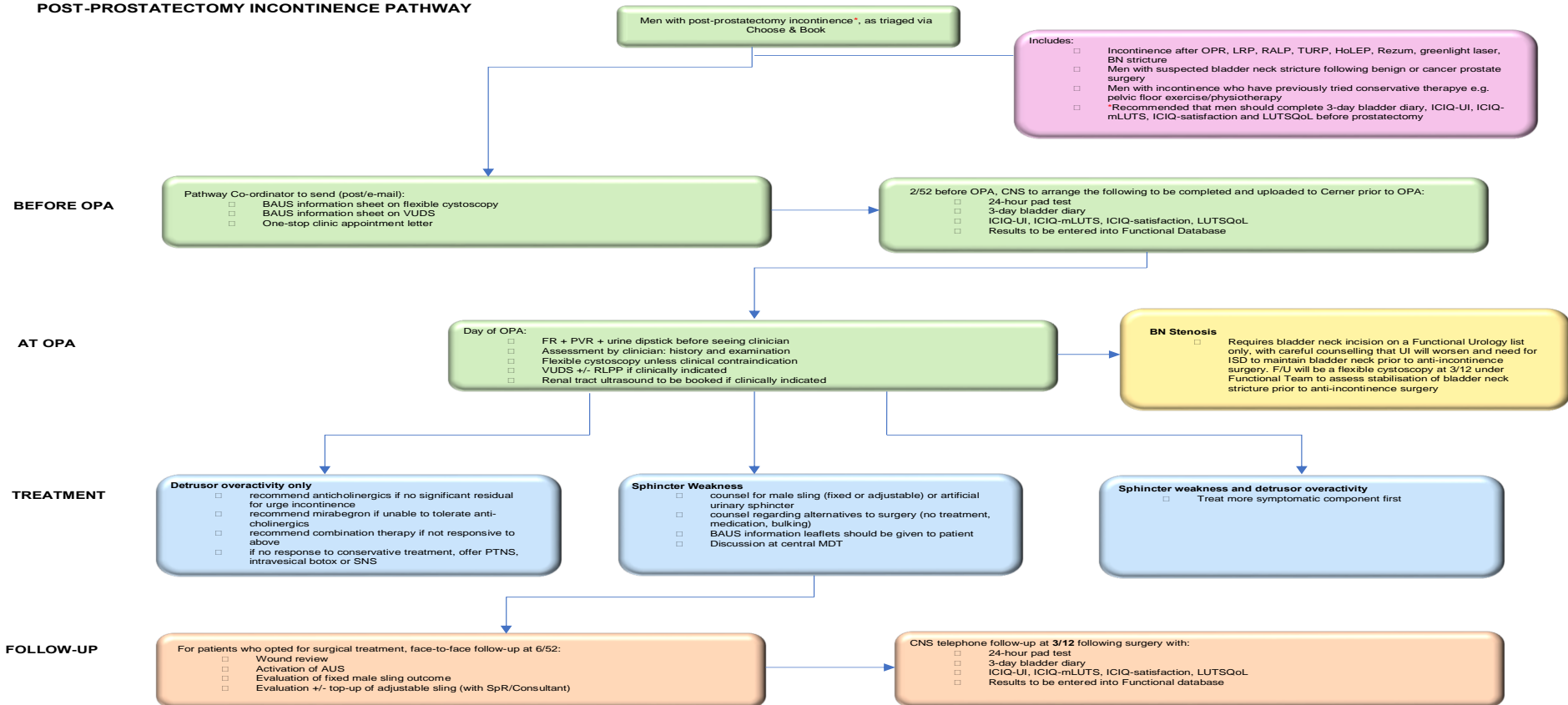


# Imperial Pathway



# Imperial Pathway

## POST-PROSTATECTOMY INCONTINENCE PATHWAY



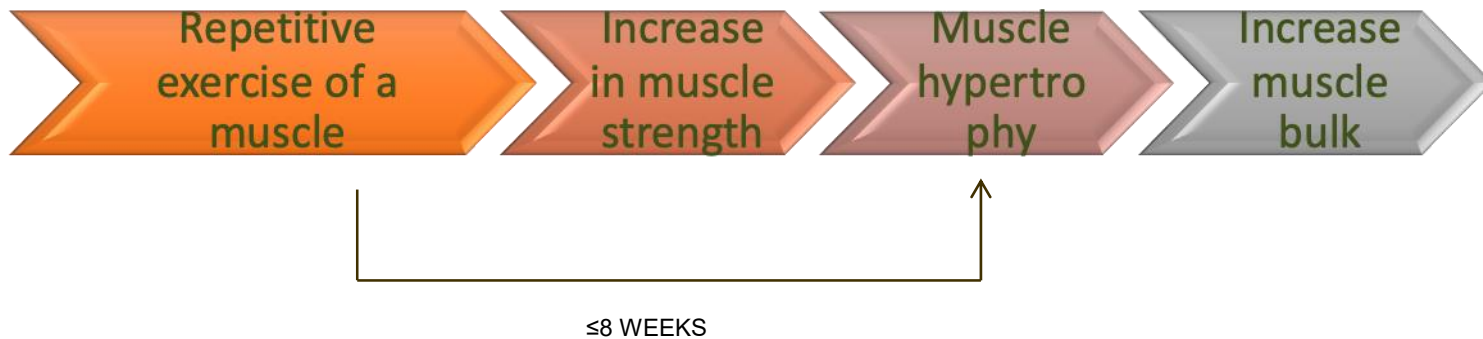
# Conservative Management of SUI

# SUI Treatment Options

- Medications
- Exercises
- Injection therapy
- Slings
- Retropubic suspension
- Artificial sphincter



# Principles of skeletal muscle strengthening



# Guidelines

## ICS

For morbidly and moderately obese women weight loss is a useful treatment to reduce UI prevalence

[Grade of Recommendation: A]

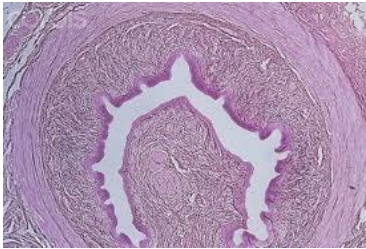
## NICE

Advise women with UI who have a BMI greater than 30 to lose weight [CG171, Sept 2019]

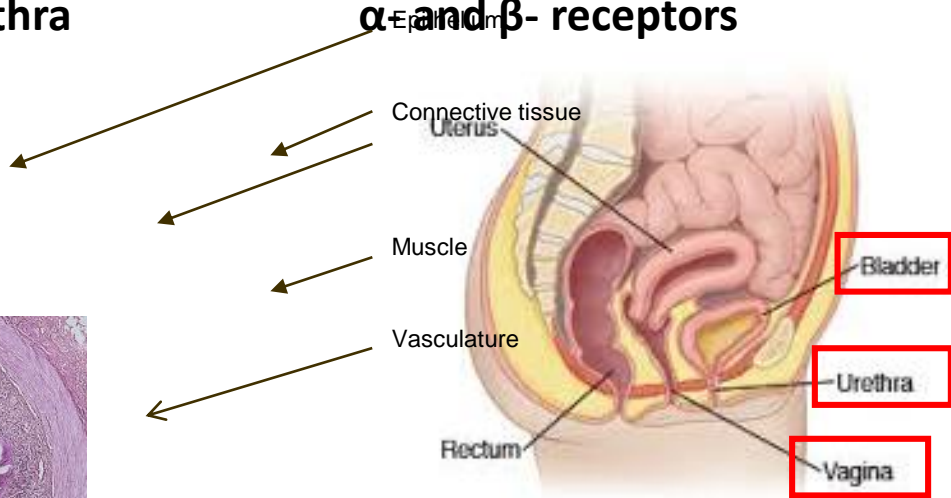
ICS:	International Continence Society
EAU:	European Association of Urology
NICE:	National Institute of Clinical Excellence

# Oestrogens

## Oestrogen-sensitive urethra



## $\alpha$ and $\beta$ - receptors



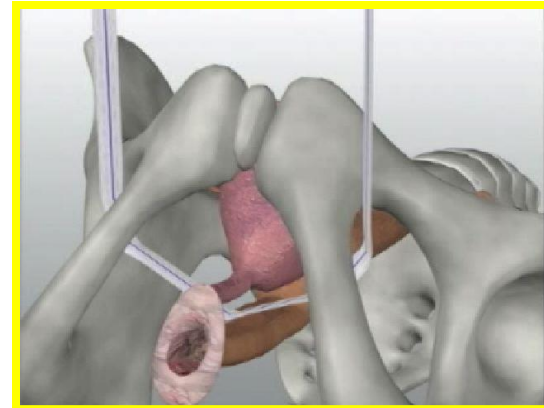
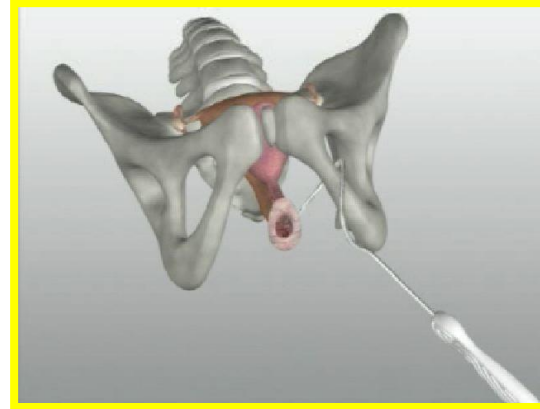
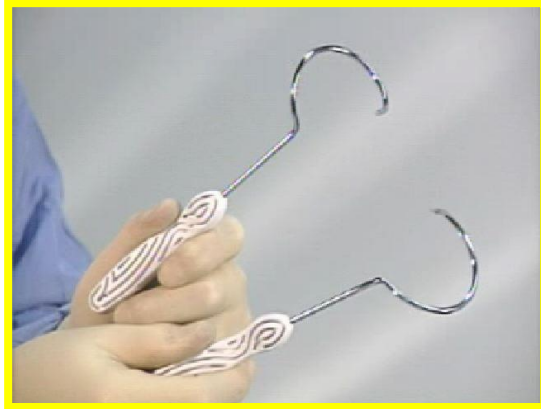
TVT

**Tension-free Vaginal tape**

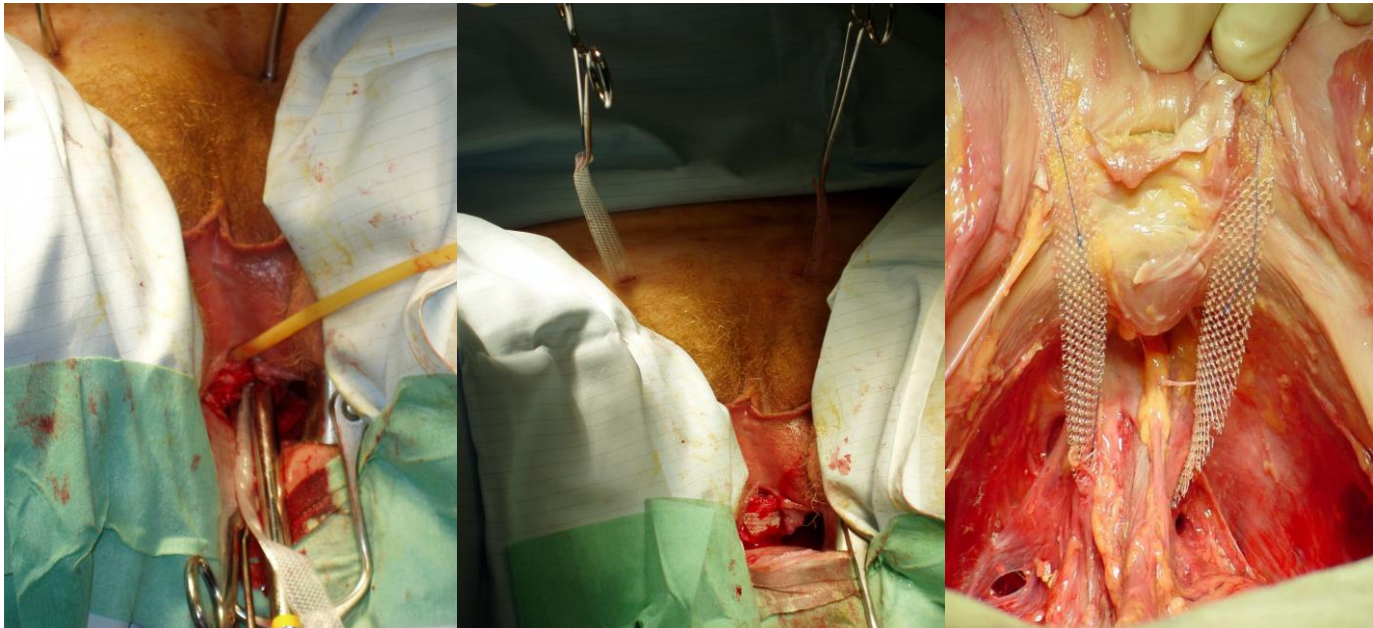




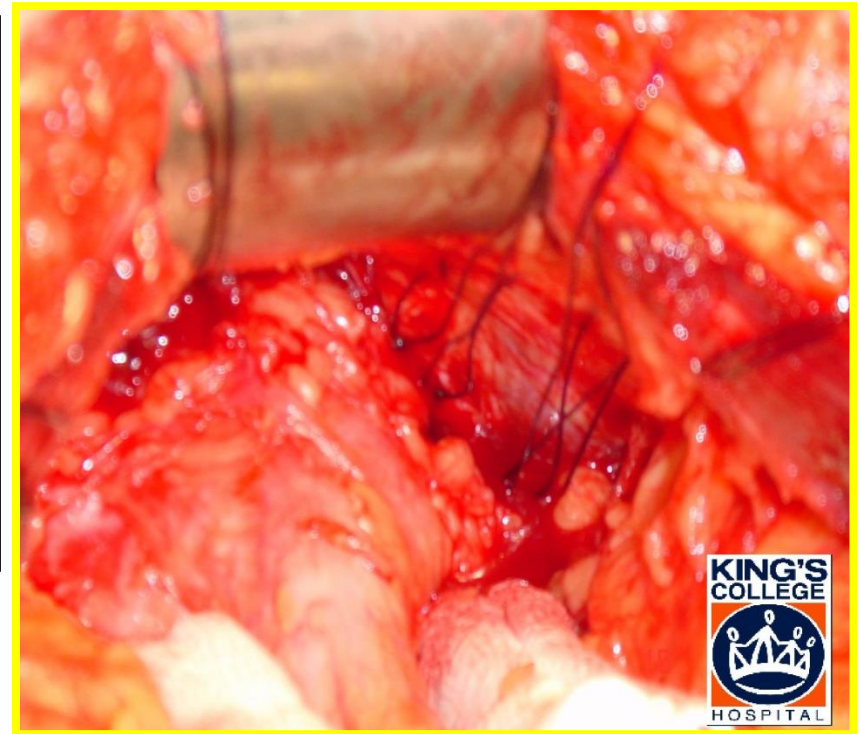
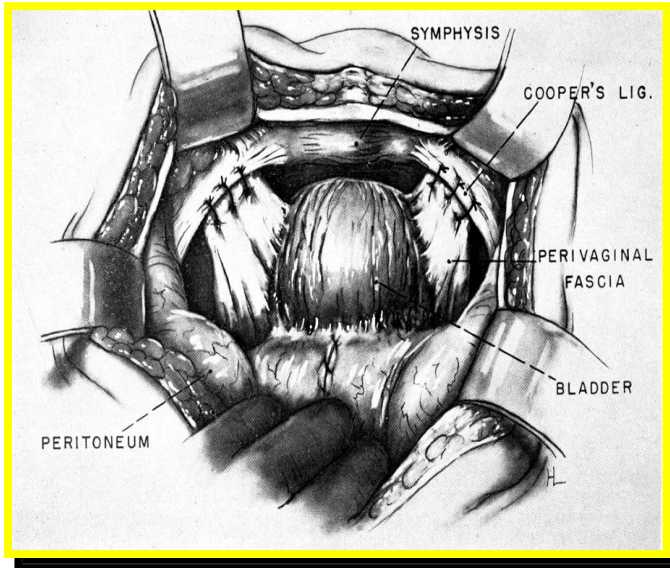
# TOT



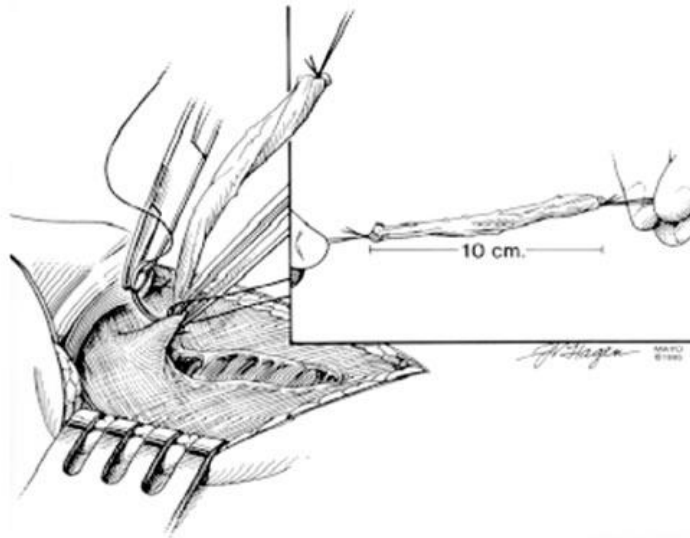
# Mid Urethral Slings



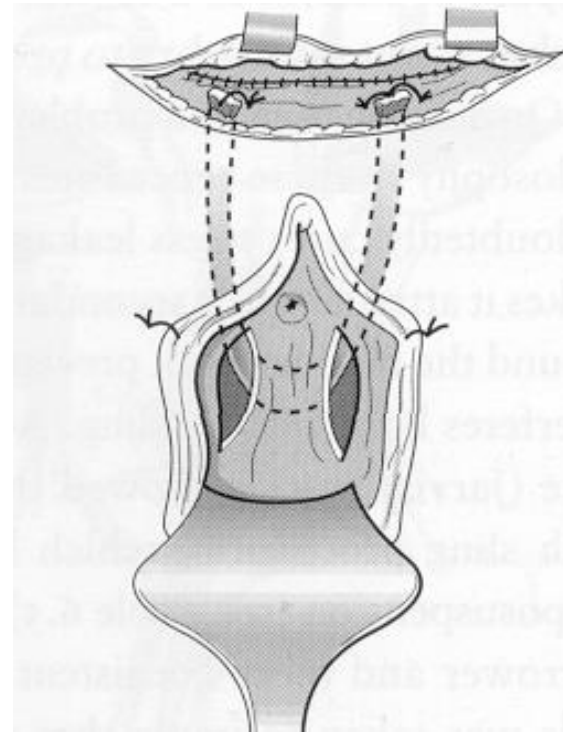
# Colposuspension



# Pubovaginal Sling



*Figure 1 - A 10 x 2-cm anterior rectus fascial strip is harvested (by permission of Mayo Foundation)*



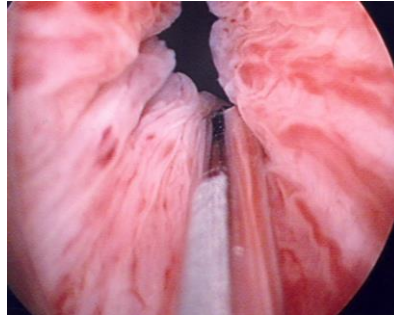
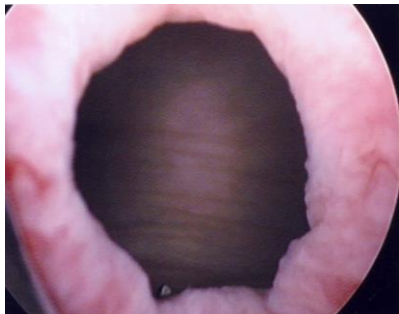


# Urethral Bulking

- Peri-urethral injection of bulking agent may provide short-term improvement in symptoms (3 months), but not cure, in women with SUI.

Level 2a evidence

## EAU and NICE Guidelines



# Cochrane Review Results

- MUS vs Colpo vs AFS similar efficacy **LE1**
- MUS vs Colpo vs AFS similar complications **LE3**

# Evolution of where we are now with mesh complications!

## 2008

- Problems with mesh acknowledged but thought to be rare

## 2011

- Decision reversed and mesh complications acknowledged to be 'not rare'
- During 2005 – 2010 there were 4000 reports of complications including 4 deaths

## 2012

- Orders to manufacturers to conduct post market surveillance studies

## 2014

- FDA has proposed to reclassify vaginal mesh from a moderate risk to a **high risk device**

***“ we will require manufacturers to provide premarket clinical data to demonstrate reasonable assurance of safety”***

# Vaginal Mesh: Scotland

- Mesh implants scandal: Legendary activist *Erin Brockovich* joins Sunday Mail campaign for NHS patients left in anguish

March, 2014

- Scottish Health Minister Calls for urgent review

May, 2014

- Shadow Health Minister accuses the government of failing women

April,

2014

- Use of meshes for prolapse and incontinence suspended pending review

2014

July





# 3 Mesh Reviews

European Commission ( SCENIHR) - Public Consultation on the preliminary Opinion on the safety of surgical meshes used in urogynaecological surgery **2015**

The Scottish Independent Review of the Use, Safety and Efficacy of Transvaginal Mesh Implants in the Treatment of Stress Urinary Incontinence and Pelvic Organ Prolapse in Women **2016**

NHS England Mesh Working Group **2017**

*MHRA review of evidence*  
*( September 2015) – part of Scottish Review*

*Cochrane Mesh review surgery*  
*( feb 2016)*



# England

- Hunt review of Mesh  
**22nd Feb 2018**
- Baroness Cumberlege suspension of mesh  
**9th July 2018**
- NHS England propose high vigilance on all other procedures
- **NICE UI 2019** guidelines  
*all pts to be offered all treatments*  
*Treatment decision aid for all*



# Patient Decision Aid

**NICE** National Institute for Health and Care Excellence



## Surgery for stress urinary incontinence

Patient decision aid

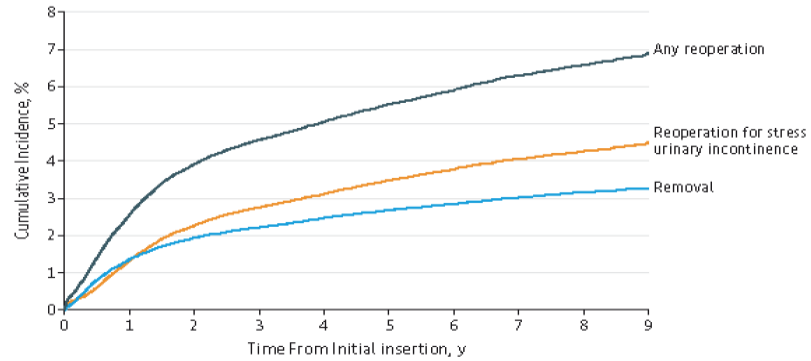


Colposuspension, rectus fascial sling and retropubic mesh sling	
What are the other possible complications?	Wound complications. In the studies NICE looked at, 1 to 10 in 100 women got these problems during the first year after mesh surgery (so 90 to 99 did not). A few more women than this got these problems after rectus fascial sling surgery than after mesh surgery (but most still did not). NICE didn't find evidence on how likely they are to happen after colposuspension.
(Continued from the previous page.)	Persistent pain in the abdomen or pelvis, or during sex. Generally in the studies NICE looked at, 1 to 10 in 100 women got these problems (so 90 to 99 did not). The evidence is very limited, and in some studies more women than this got these problems. It isn't possible to say for sure whether these problems are more likely to happen with one of these types of operation than either of the other two. Painkiller medicines can help, but not always. The pain might not trouble you very much, or it might be severe.
The diagrams on page 4 may help make sense of the numbers.	Pelvic organ prolapse. This includes the rectum bulging into the vagina. This might not be troublesome but it can cause discomfort and problems with opening the bowels. In the studies NICE looked at, up to 25 women in 100 got this at some time after colposuspension (so 75 or more did not), but it's not clear how many of them would have had these problems if they hadn't had surgery. Pelvic organ prolapse seems more likely after colposuspension than after mesh surgery but the evidence is very limited. It isn't possible to say for sure whether these problems are more or less likely to happen with mesh surgery compared with rectus fascial sling surgery.
	Mesh complications (if you have mesh surgery). See the next page of this decision aid.

## Long-term Rate of Mesh Sling Removal Following Midurethral Mesh Sling Insertion Among Women With Stress Urinary Incontinence

Ipek Gurol-Urganci, PhD; Rebecca S. Geary, PhD; Jill B. Mamba, PhD; Jonathan Duckett, FRCOG; Dina El-Hamamsy, MRCOG; Lucia Doban, MD; Douglas G. Tincello, MD; Jan van der Meulen, PhD

Figure 2. Mesh Sling Removal, Reoperation for Stress Urinary Incontinence, and Any Reoperation According to Time After Initial Mesh Insertion in 95 057 Women



No. at risk	95057	87800	79221	69654	59871	49499	38802	27821	16708	6428
Any reoperation	95057	87800	79221	69654	59871	49499	38802	27821	16708	6428
Reoperation for stress urinary incontinence	95057	88963	80661	71050	61170	50628	39730	28535	17148	6590
Removal	95057	88940	80955	71514	61664	51207	40308	29058	17502	6741

- 10-15% chronic pelvic pain
- 10% reoperation rate
- Similar dysparunia rate
- Mesh contracture

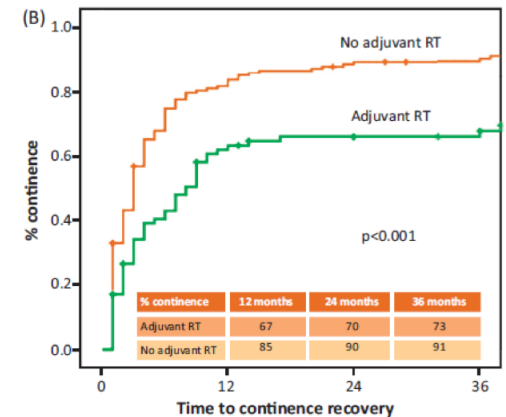
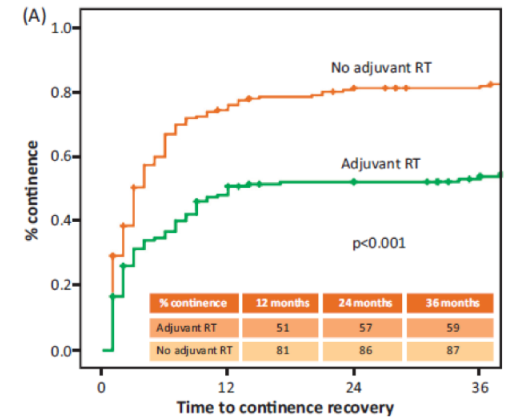
# Male SUI

# The problem

- What's the true incidence of iatrogenic incontinence post surgery?
- From pt reporting
  - 88% post-RRP, 42% post-TURP at 3 weeks postop
- Post-prostatectomy
  - Lack of standardised definition and reporting
  - Holm et al J Urol 2014
    - Various definitions produced different rates of MSUI
    - PROMS/ pads/ surgeon reporting

# Radiotherapy effects

- Adjuvant DXT makes leakage worse
  - Suardi et al Eur Urol 2014
- At 15 years, no significant difference in incontinence rates between DXT and ORP
  - Resnick MJ et al NEJM 2013

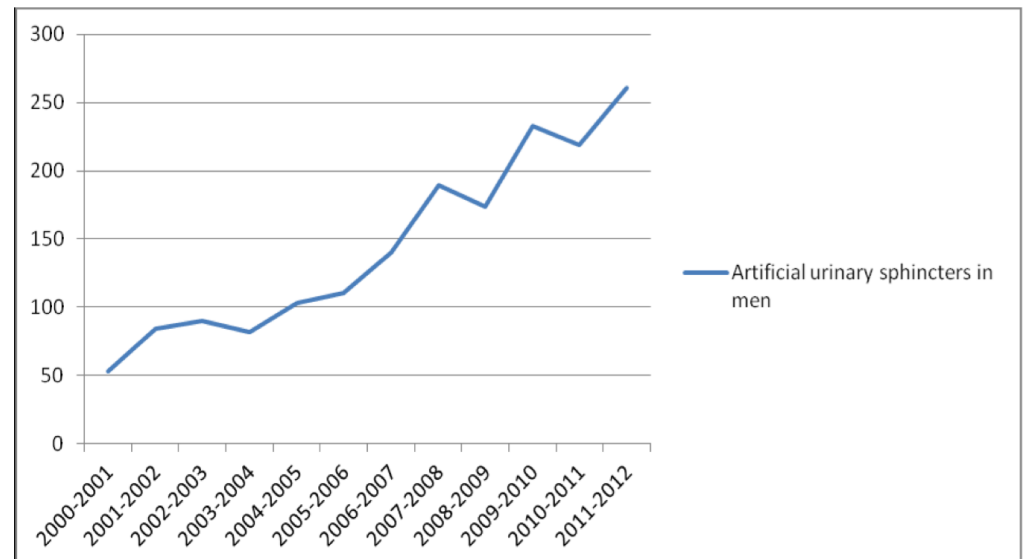




# Anti MSUI surgery

- Kim et al J Urol 2013
  - SEER data
  - 6% undergoing surgery for SUI after RRP

- Withington et al BJU International 2014



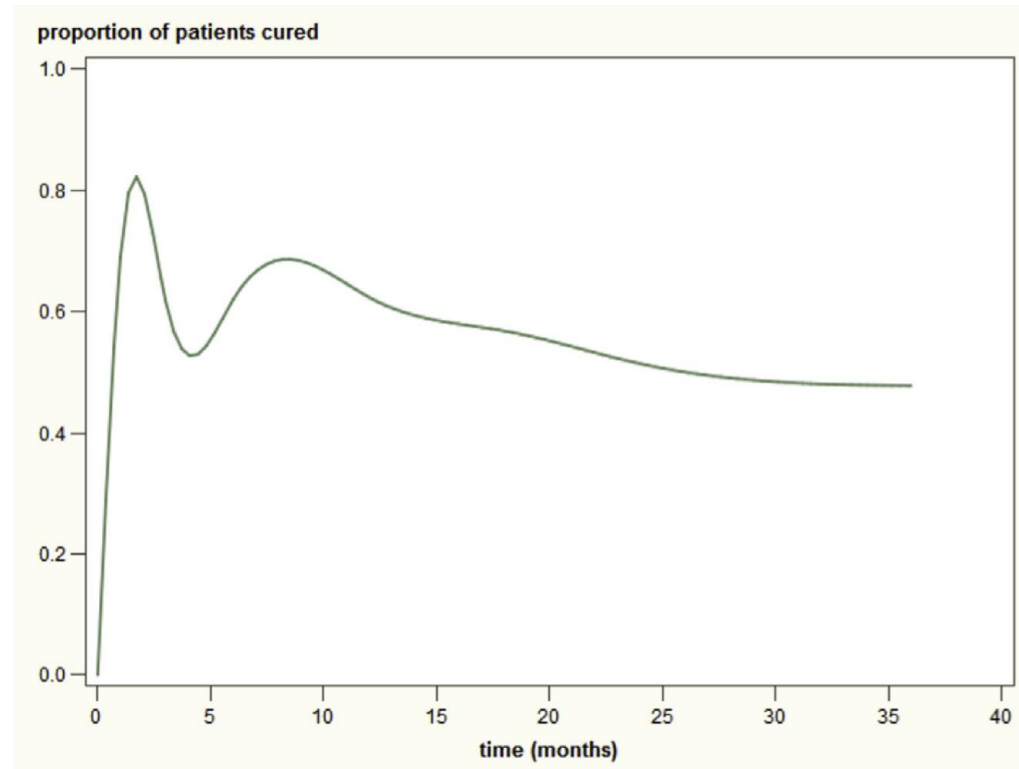
# Non-invasive therapy

- Pelvic floor muscle training
  - Evidence problems
    - Definitions, use of preop PFMT, use of biofeedback, non-randomised, non-controlled studies, patient motivation and compliance
    - Preop/postop
    - With/without biofeedback
    - Within a rehabilitation program
  - Meta-analysis Hunter et al *Cochrane Database Sys Rev* 2004
    - 11 studies and 1028 men
    - Achieved continence faster with PFMT but same at one year
  - **Reduces early severity and duration of UI but does not reduce UI rates at one year**



## ADVANCE – 3 year f/u

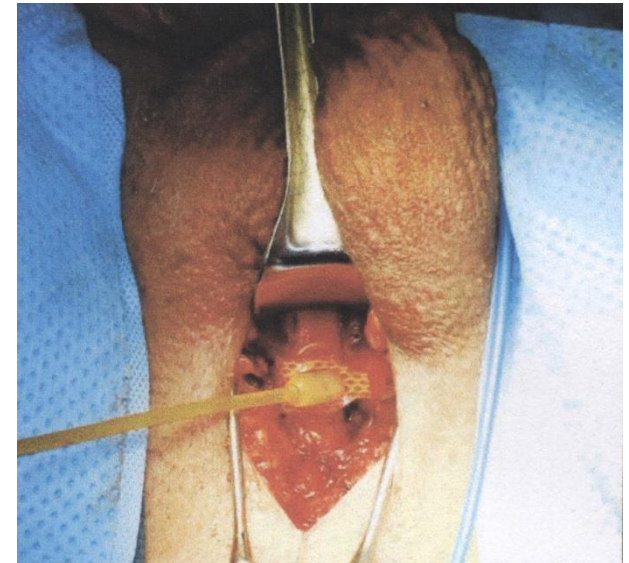
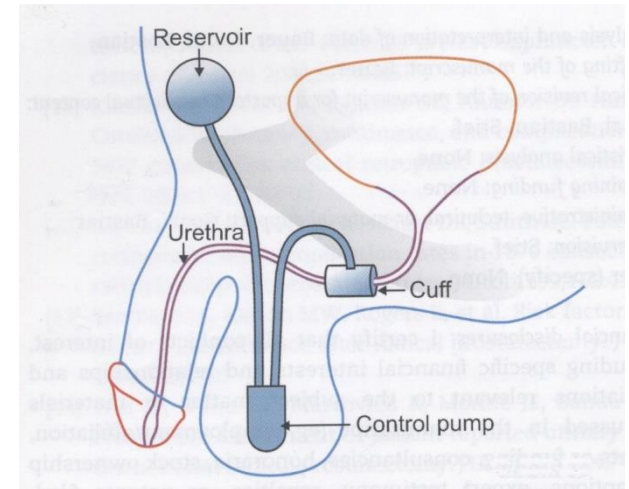
- Kowalik et al NUU epub
  - 60% cured /13% improved /27% failed
- Zuckerman et al Urology 2014
  - 62% dry
- Rehder et al Eur urol 2012
  - 53% cured /24% improved /23% failed



# Artificial urinary sphincter

- Remains gold standard

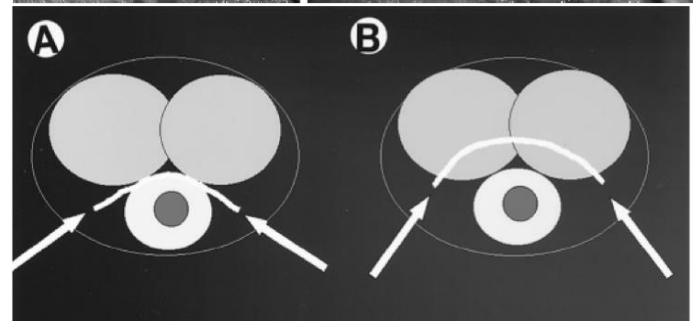
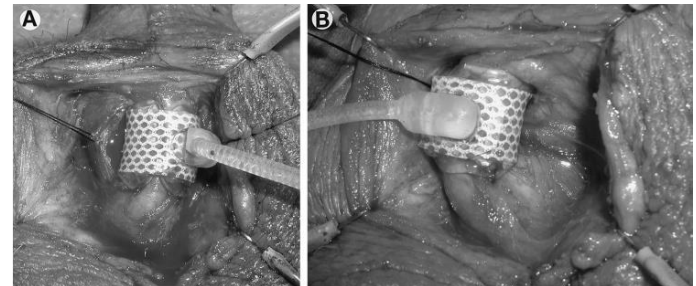
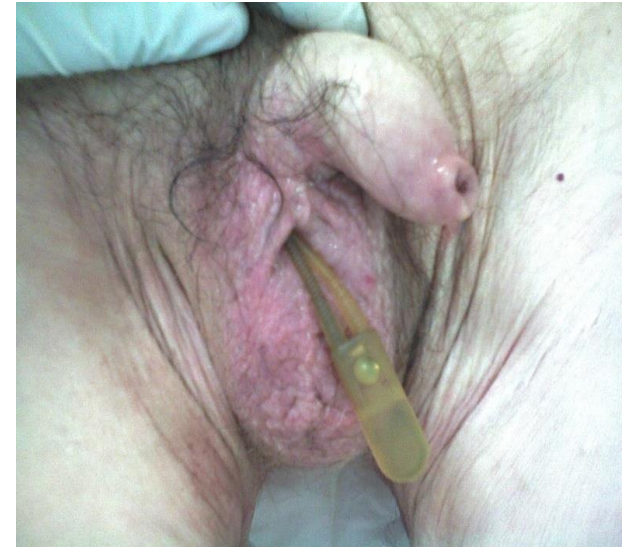
- Highest long term success rates
- 80-90% dry
- High pt satisfaction rates
- 70-80% continence rates after DXT



# Artificial urinary sphincter

- Probs

- Fiddly
- High surgical revision rate – mechanical failure, erosion, infection
- falling with Inhibizone – 1-2% infection
- 42% to 17% with design changes
- 60% revision at 10 years
- Average life span 11 years





## *National Institute for Health Research*

### **Are you considering having surgery for urine leakage after your prostate operation?**

If you would consider having an operation for your leakage you may be able to take part in a research study called the **MASTER** trial.

The **MASTER** trial is about comparing two operations for urine leakage after prostate surgery in men.

To take part you will need:

- to be male
- to have bothersome urine leakage after a prostate operation
- to have had simple treatments including pelvic floor exercises
- to have persistent symptoms nevertheless

If you would like to find out more, please ask your urologist or nurse about the **MASTER** trial.

For further information and advice about taking part, contact:

**Kelly Leonard, Research Nurse**

Phone: **01223 348442**

Email: [kelly.leonard@addenbrookes.nhs.uk](mailto:kelly.leonard@addenbrookes.nhs.uk)

**Nikesh Thiruchelvam, Local PI**

Phone: **01223 216068**

Email: [nikesh.thiruchelvam@addenbrookes.nhs.uk](mailto:nikesh.thiruchelvam@addenbrookes.nhs.uk)

Thankyou

