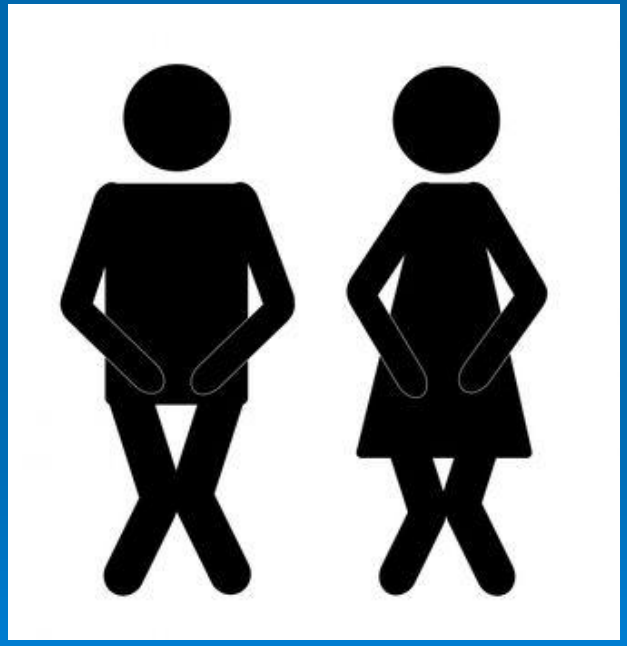
# THE OVERACTIVE BLADDER – A MATTER THAT JUST WON'T WAIT

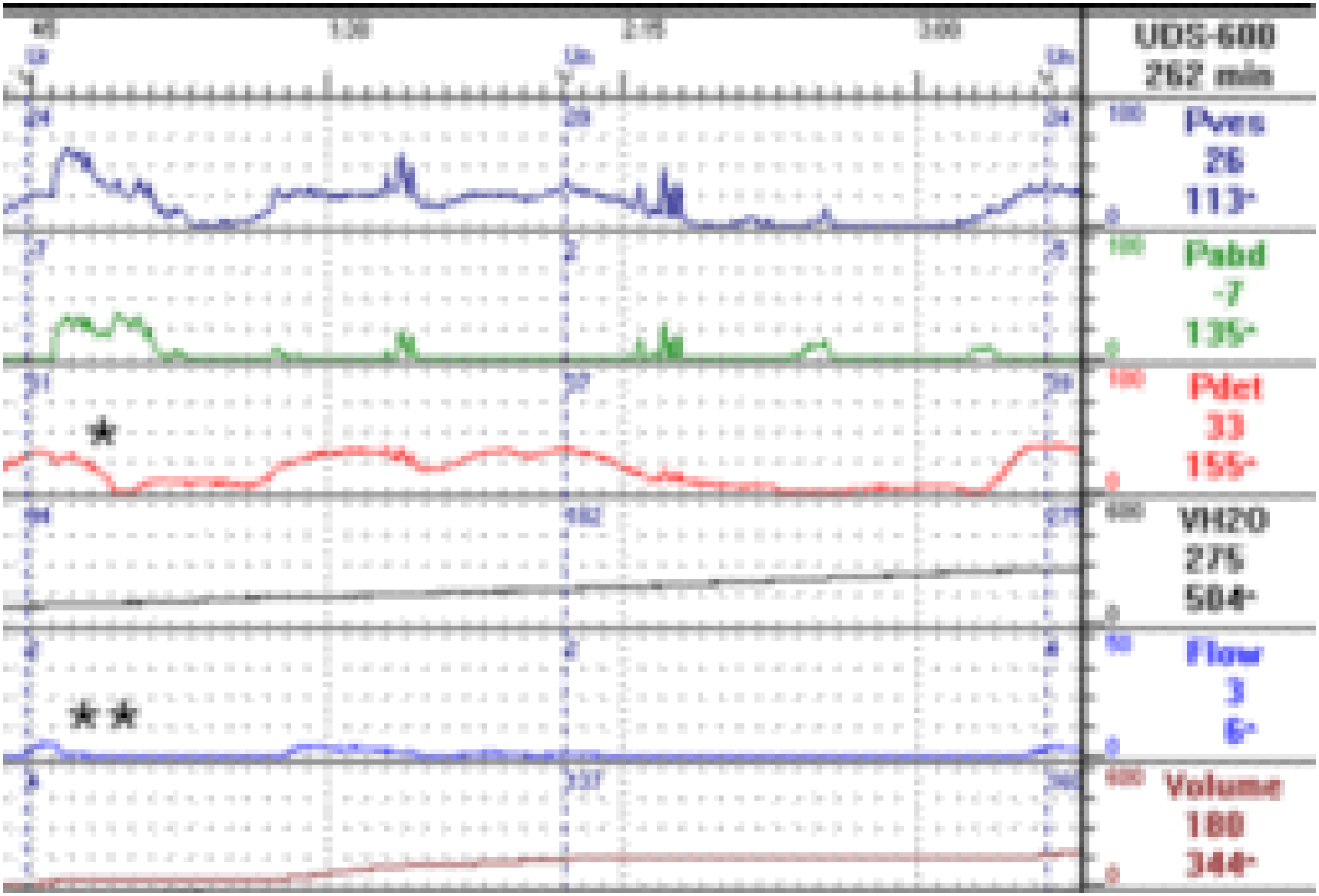


ANNE-MARIE DAVIES MD FRCS (UROL)

- Investigation and treatment of idiopathic urgency
- Addressing mixed urinary incontinence (MUI)
- Urgency post sling surgery

# OVERACTIVE BLADDER SYNDROME

- OAB is defined by ICS as urgency, with or without urgency incontinence, usually with frequency and nocturia.
- A symptomatic diagnosis, on history alone, suggestive of UDS proven DO, in the absence of proven infection or other pathology
- DO is  a urodynamic observation of involuntary detrusor contractions during the filling phase which may be spontaneous or provoked/phasic or terminal




* Detrusor Instability

** Leak

# MANAGEMENT OF OAB HISTORY

- Frequency, urgency, nocturia
- Frequency in SI
- Other causes - infection, stones, chronic retention, CIS, neurological deficit

# MANAGEMENT OF OAB EXAMINATION

- Gross leak on coughing
- Prolapse
- Oestrogen deficient tissues
- Pelvic floor contraction

# GOALS OF TREATMENT

- To prevent or reduce episodes of urgency when access to a toilet is limited
- To prevent or reduce episodes of incontinence

# MANAGEMENT OF OAB CONSERVATIVE

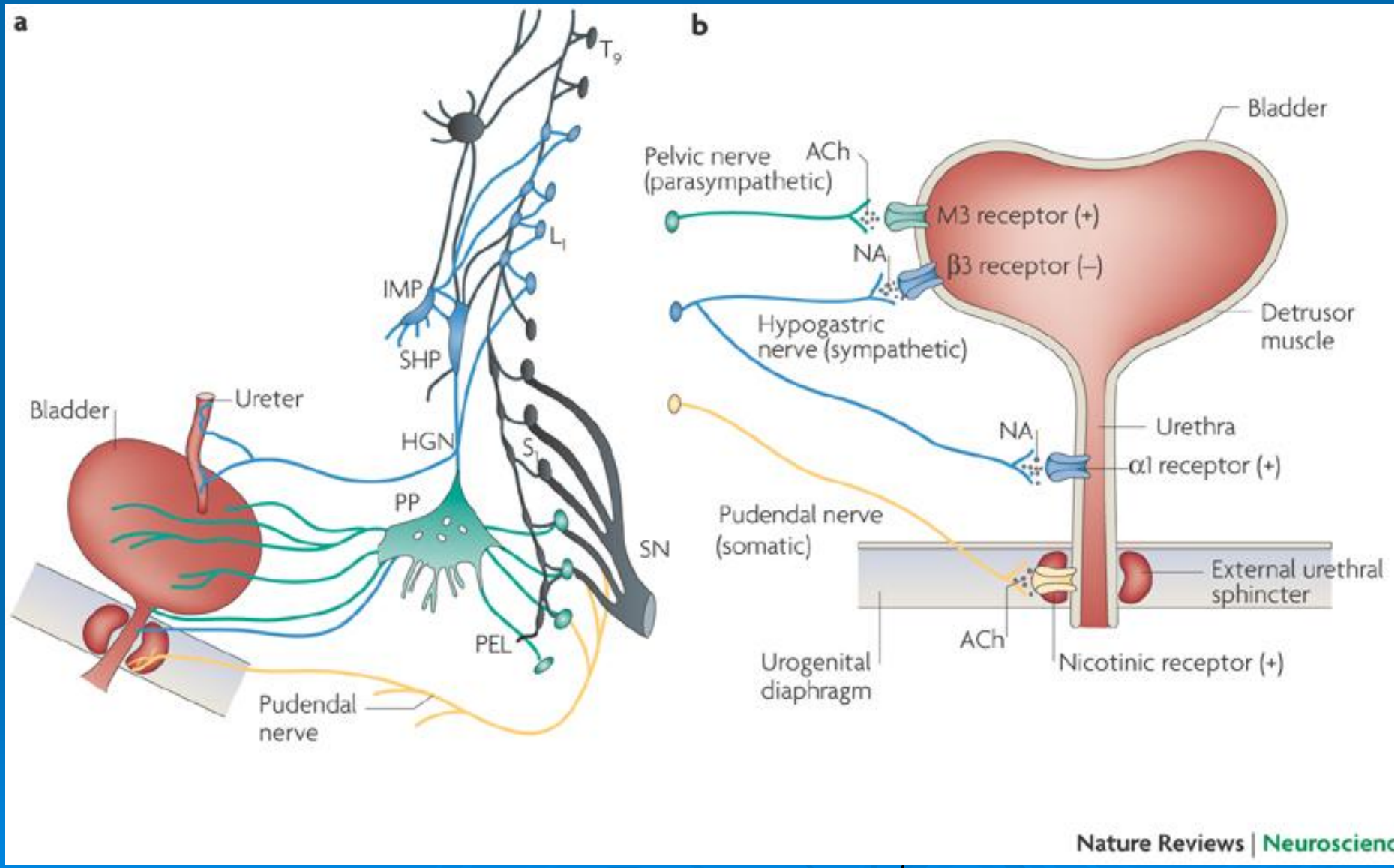
- Voiding diaries
- PVR
- Fluid management

- Pelvic floor exercises
- Bladder drill 6/52

# Management of OAB
# Medical

Anticholinergics mainstay of treatment

- All decrease incontinence episodes and frequency and increase volume voided
- Dry mouth, constipation, blurred vision, CNS, indigestion




Nature Reviews | Neuroscience

# Anticholinergics

| | |
|---|---|
| Cure/improvement | RR 1.41 / 1.39 |
| Incontinent episodes/24hr | -0.6 / -0.54 |
| Voids/24hr | -0.6 / -0.69 |
| Dry mouth | RR 2.56 / 3.00 |

Herbison et al BMJ 2003 326(7394):841

Cochrane database 2006(4):CD003781

# Anticholinergics

- Oxybutinin - flexible dosing up to tolerance
- Tolterodine - good efficacy/side effect balance. Safe in BOO. Few cognitive SE
- Tropsium chloride - doesn’t cross blood-brain barrier. New once daily formulation

# Anticholinergics

- Solifenacin - STAR  greater efficacy than tolterodine (urgency) slightly greater side effects
- Fesoterodine - structurally related to Tolterodine. Flexible dosage
- Transdermal oxybutinin - Decreased side effect profile

# Anticholinergics

Extended release – less dry mouth

Tolterodine > oxybutinin RR 0.75

Tolterodine = transdermal oxybutinin

Cochrane Database 2005(3):CD005429

Novara et al Eur Urol 2008 54(4):740-63

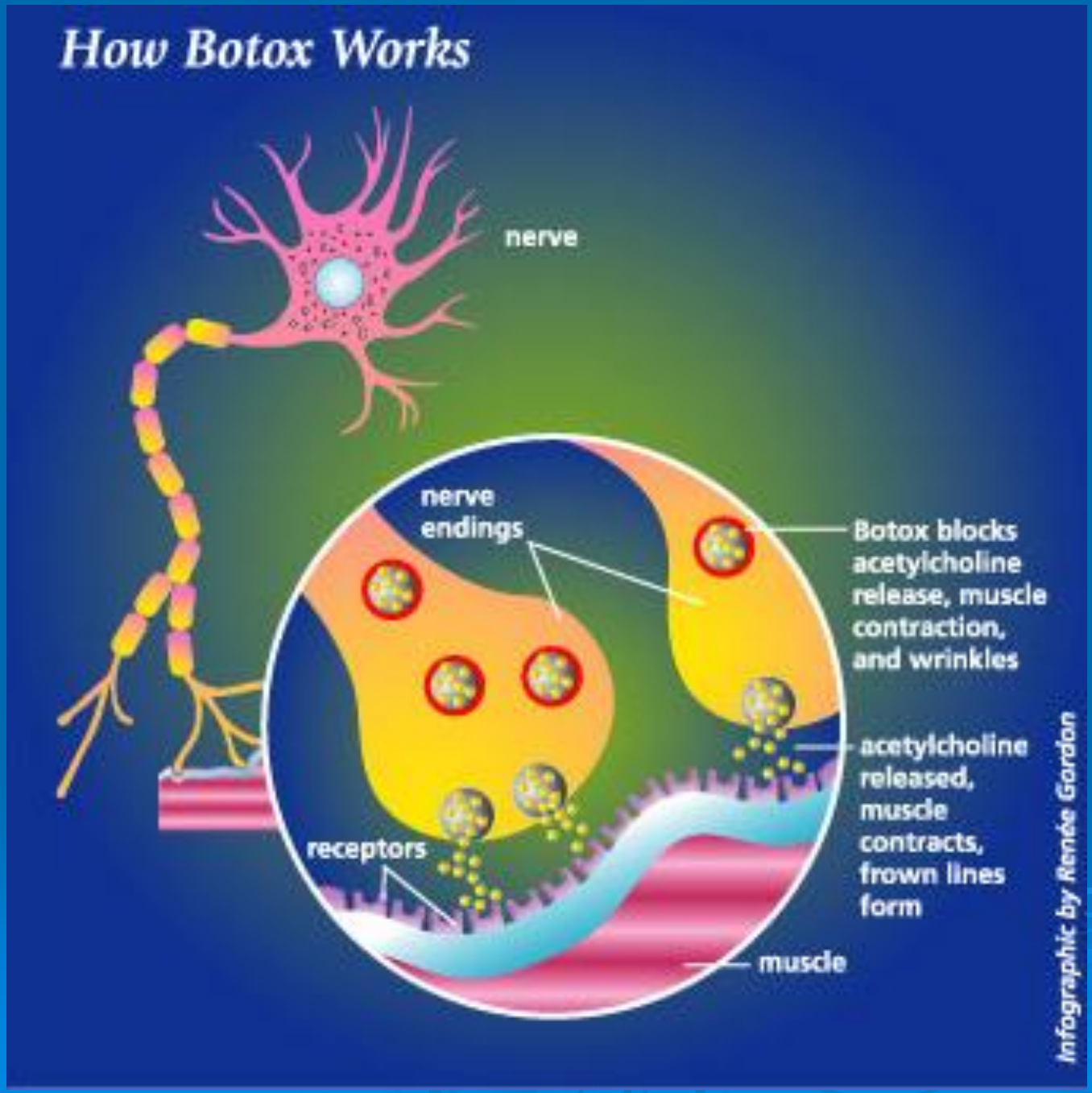
# Management of OAB Medical

- Best results when combined with conservative measures
- Realistic goals when prescribing
- Patients respond differently to different drugs
- Review

"Urology Department. Can you hold?"

# Management of OAB Botox A

- Used in Switzerland in 2000 for neurogenic overactivity
- Use extended to IDO
- Efficacy up to 80%, Retention 5%
- Lasts for 6-9 mths
- Longterm effects in bladder not known


How Botox Works
nerve
nerve endings
Botox blocks acetylcholine release, muscle contraction, and wrinkles
acetylcholine released, muscle contracts, frown lines form
receptors
muscle
Infographic by Renée Gordon

# APPLICATION OF BOTOX

- Injected at 30 - 40 sites, sparing trigone
- 100-300U
- GA or LA
- Daycase

# EFFECTS OF TREATMENT

- Cessation of urge
- Decreased frequency
- Continent

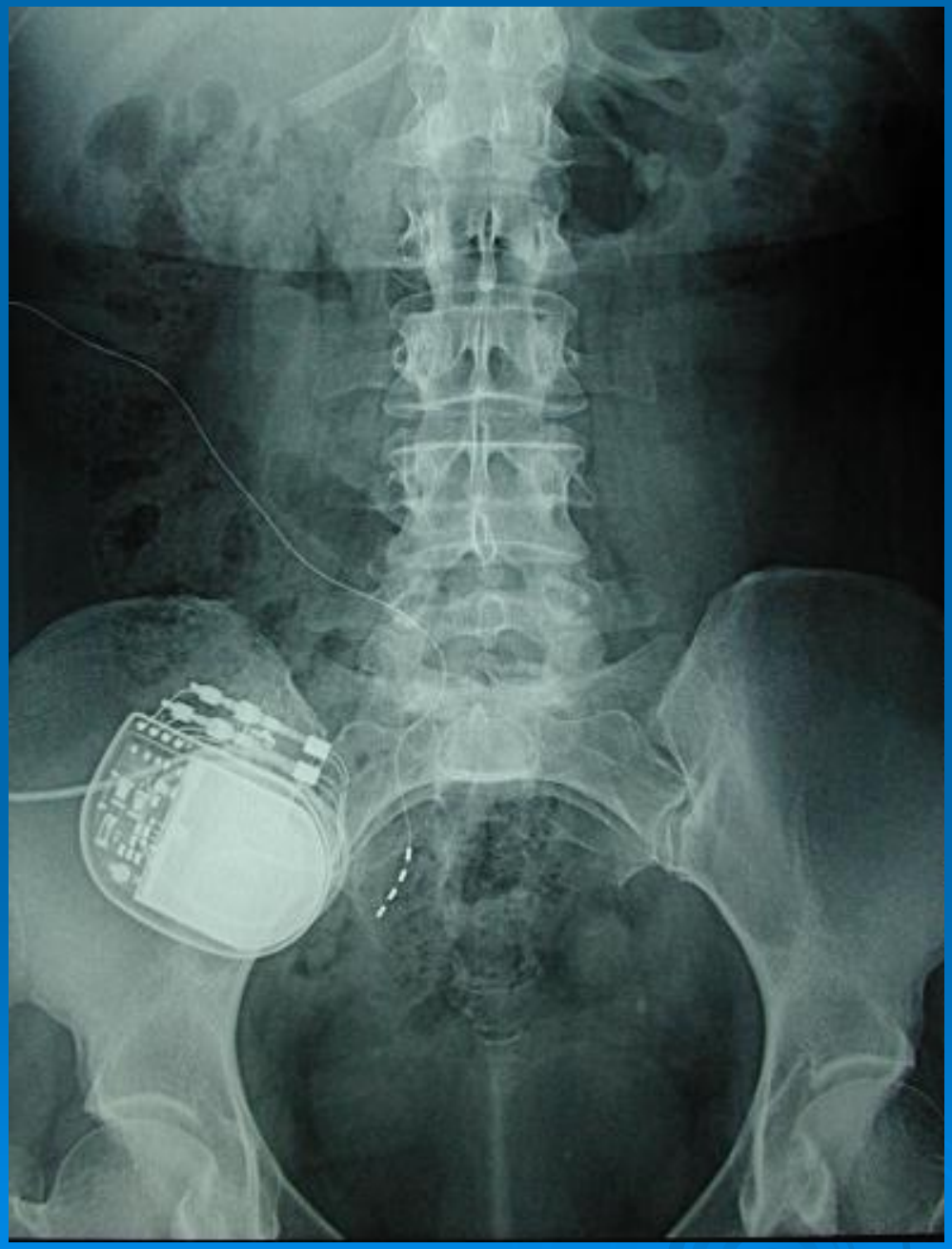
- Slow obstructive voiding
- Residuals and UTI
- Retention
- Rare atypical / systemic reactions

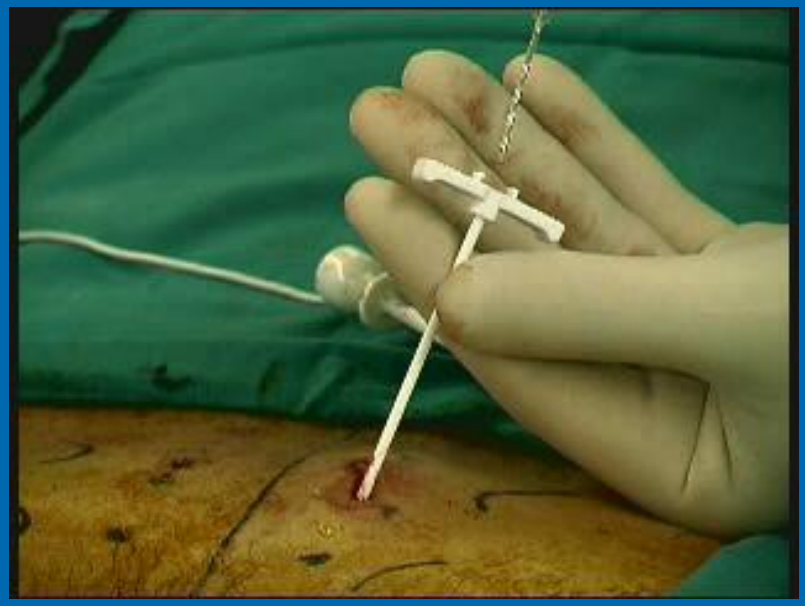
# CONCLUSIONS

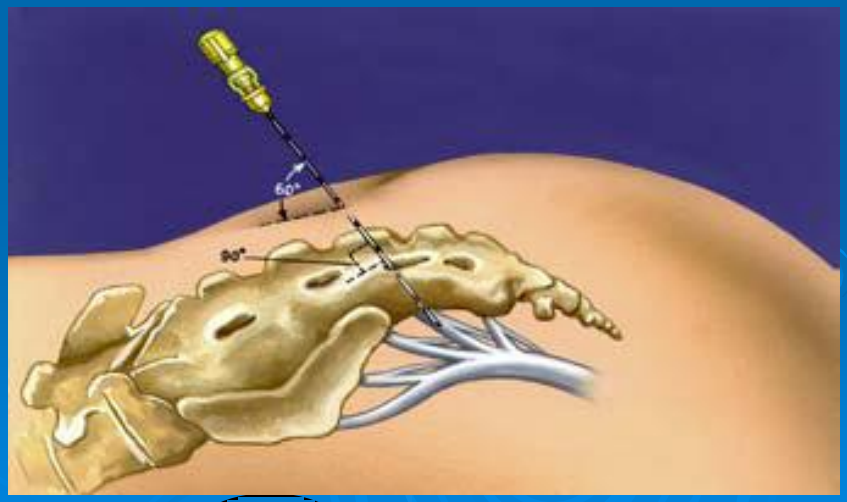
- Promising treatment for refractory OAB
- Clear counselling essential
- Outcomes less good if mixed incontinence
- Role in IC unclear
- Too easy to deliver?

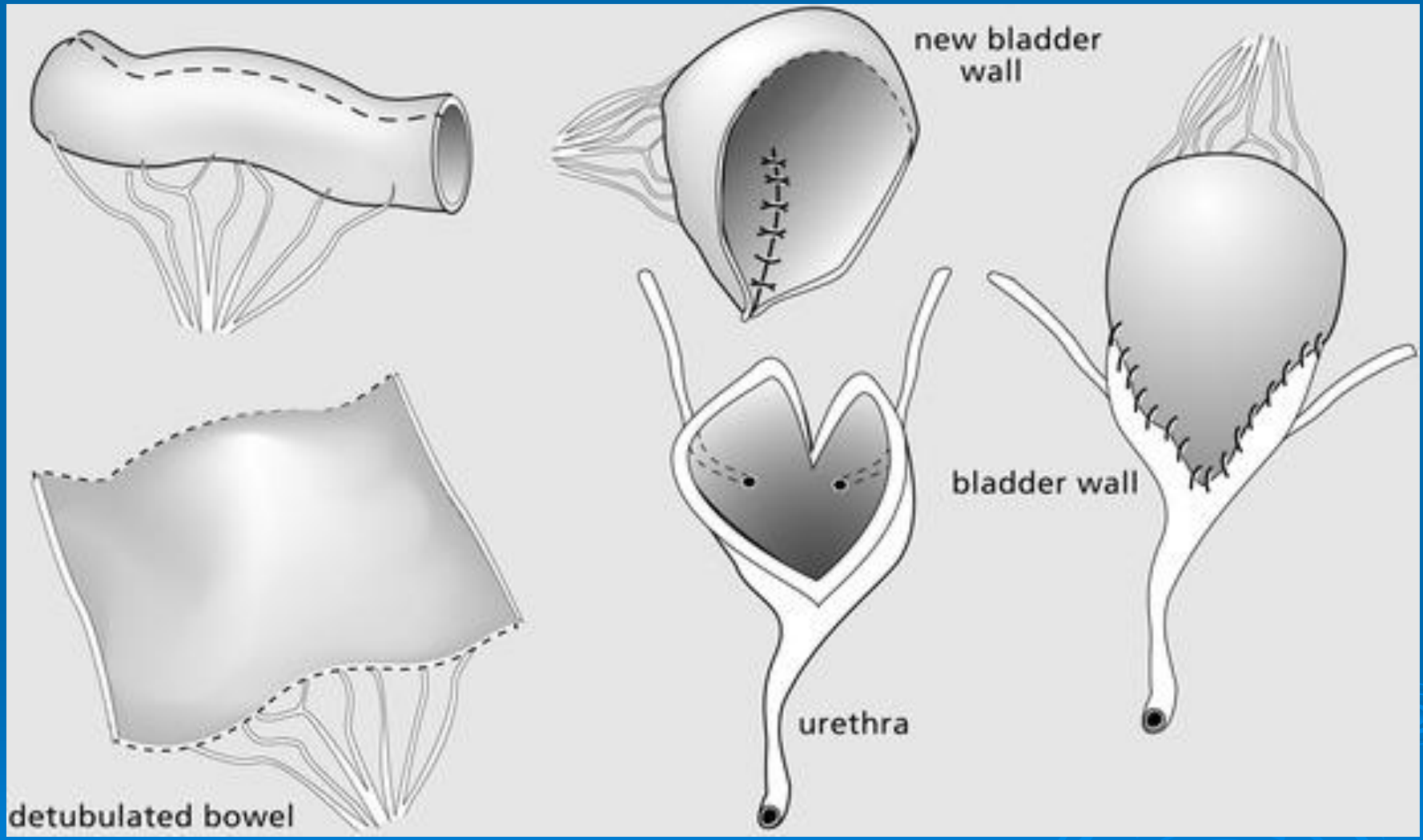
# Management of OAB Surgical

- Assessment with Urodynamics
- Neuromodulation - transforamen tined lead with stimulation of S3/S4
- Preimplant test
- 30% longterm failure
- Clam ileocystoplasty
- Diarrhoea/ UTI / ISC / malignant change






60°
90°


new bladder wall
bladder wall
urethra
detubulated bowel

# Management of Mixed Urinary Incontinence (MUI)

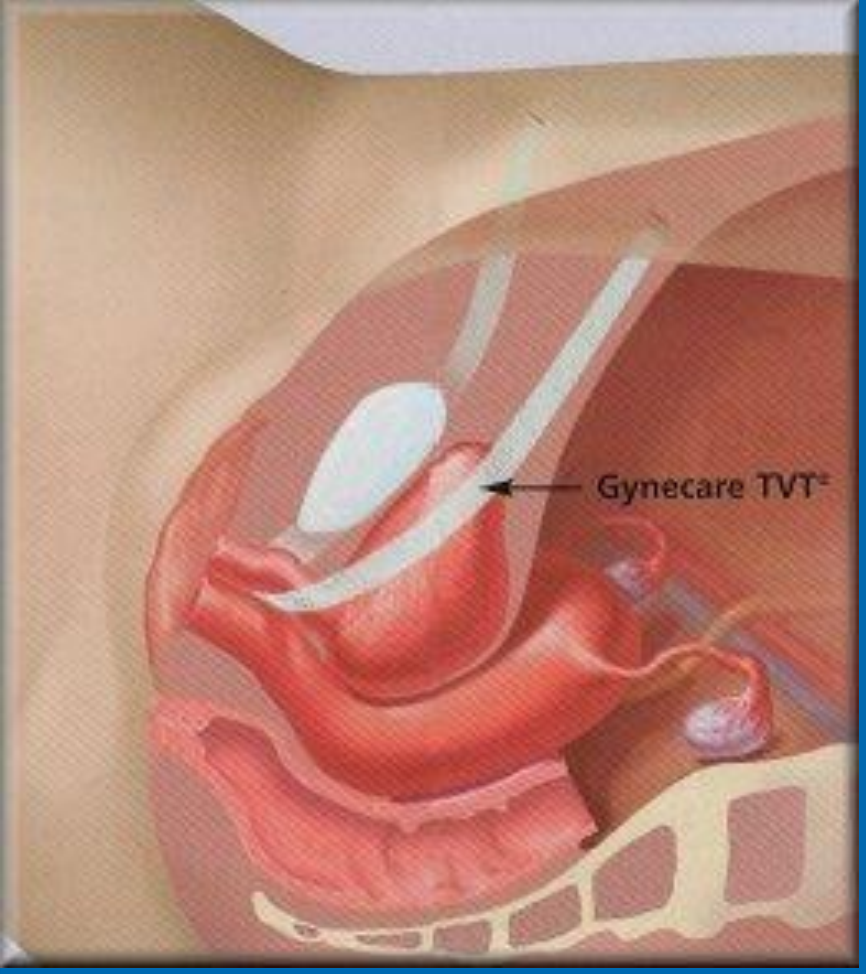
- History, examination
- Initial conservative management
- Address dominant symptom
- Assess with urodynamics

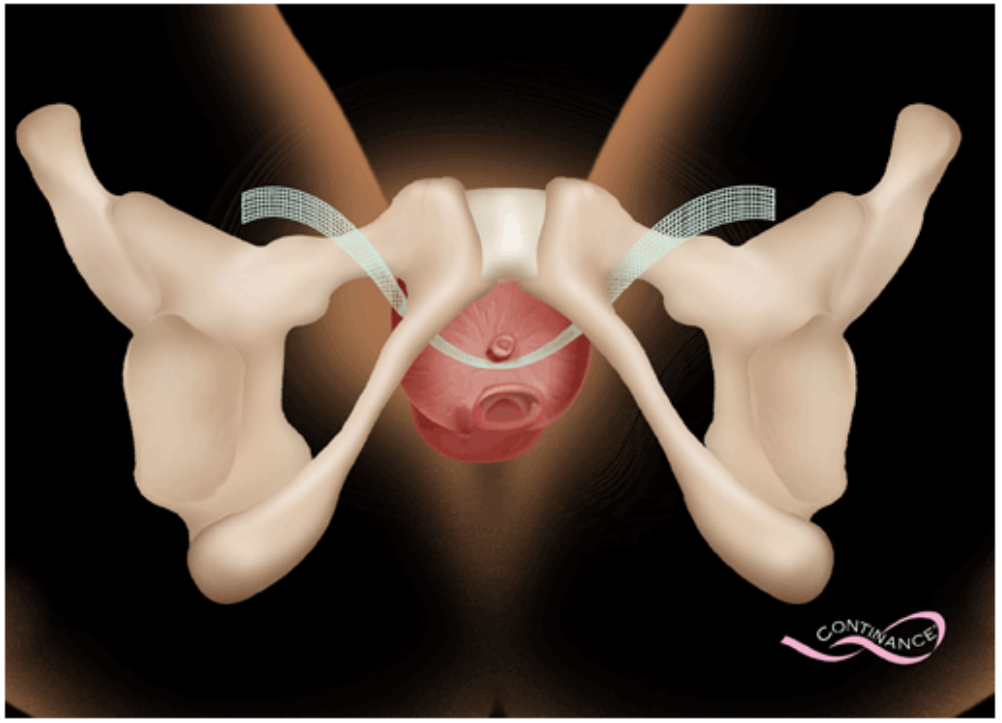
# Management of MUI

- So what if they need a sling?

- 305 women with mixed symptoms
  31.5% had resolution of urgency
  53% in TOT group

Gamble et al AMJOG 2008;199:696


Gynecare TVT


CONTINANCE

# De Novo Urgency post Sling

- 1.5% - 25%
- Combination of mild outflow obstruction and urethral irritation
- Lower rates in TOT

Botros et al AmJOG 2005;193:2144-8

# De Novo urgency post sling

- Immediate

Infection

- Early

Obstruction – pull down/UD/Lysis

- Late

1.5% at 1 year

# What are we waiting for?

- More high quality studies
- Better drug therapies
- Longer term data on BOTOX

# Thank You