Pelvic Floor Health in Menopausal Women

Mr Tim Hillard DM FFSRH FRCOG
Consultant Gynaecologist
University Hospitals Dorset, Poole, UK
Declaration of Interests

Financial:
• Honoraria for lectures and consultancy from Besins and Theramex

Professional:
• Past President and current Board Member of the British Menopause Society
• Board Member of the International Menopause Society
• Associate Editor of Climacteric
Pelvic Floor Health in Menopausal Women

- Introduction
- Common Contributory Factors and Management Principles
- Uro-genital atrophy:
  - Management options
- Bladder problems:
  - Assessment and management
  - Overactive bladder
  - Stress Incontinence
- Pelvic Organ Prolapse:
  - Assessment and Management
INTRODUCTION

PELVIC FLOOR DYSFUNCTION CAN HAVE A MAJOR IMPACT ON:

- Bladder Function
- Bowel Function
- Sexual Function
- Discomfort/pain

- Common
- Unpleasant
- Debilitating
- Socially isolating
- Psychologically damaging
- Lower self esteem
Common Contributory Factors

- Age
- Menopause
- Pregnancy
- Pelvic floor trauma - childbirth
- Poor pelvic floor tone – genetic/acquired
- Increased intra-abdominal pressure  
  e.g. pelvic mass, obesity, chronic cough
- Repeated straining, strenuous activity
- Previous continence or pelvic floor surgery (up to 30% recurrence)
Common Management Principles

FIRST DO NO HARM

- Assess impact on quality of life
- Weight management (BMI > 30)
- Fluid and dietary advice
- Pelvic Floor re-education – physiotherapy
- Ensure adequate oestrogenisation
- Establish patient led goals for treatment
- Detailed investigations not required before commencing conservative treatment
- Multi-disciplinary team approach
PELVIC FLOOR RE-EDUCATION

- Should be used for at least 3 months with a health professional specialising in the pelvic floor who should ideally be part of the multi-disciplinary team

Bio-feedback

Vaginal Cones

NICE CG171 2013
NICE NG123 2019
Ensure adequate oestrogenisation

What is in a Name?

- Vaginal dryness
- Vaginal atrophy
- Atrophic vaginitis

- Vulvovaginal atrophy (VVA)
- Urogenital atrophy (UGA)
- Genitourinary Syndrome of Menopause (GSM)
Postmenopausal Changes in the Vagina

PREMENOPAUSAL

Erectile tissue

Folds or rugae

Muscular coat

Inner lining contains large amount of glycogen

POSTMENOPAUSAL

Reduced blood flow and transudation

Loss of folds

Loss of inner lining and glandular function

Glycogen depletion leads to rise in pH from 4-7

Vaginal Epithelium
Common:
• Over 40% women over 60 and 66% women over 75 have some symptoms of vaginal atrophy (Sturdee 2010)

Underrecognised:
• only about 25% seek help, partly because of embarrassment, fear, ignorance or acceptance (Winnerker 2011)

Underreported:
• 45% postmenopausal women reported vaginal symptoms but only 4% identify these as related to menopause (Nappi 2012)

Undertreated:
• 62% women discussed their symptoms with a HCP but only 10% said HCP initiated discussion (Nappi 2015)
The Burden of UGA

General:
- impact on their lives (80%), lower self esteem (26%), decreased physical activity level, poor sleep
- associated with decrements in quality of life, comparable to conditions such as arthritis, COPD, asthma, and IBS

Urinary Tract and Pelvic Floor:
- Impact includes urinary frequency, urgency, nocturia, dysuria, bacteriuria and recurrent UTI

Sexual Function:
- increased sexual dysfunction (75%), impaired partner relationships (33%)

Other Conditions in which UGA may present

- GnRH agonists
- Hypothalamic amenorrhea
- Postpartum
- Pelvic irradiation
- Chemotherapy
- Aromatase Inhibitors

- Young women undergoing chemo or radio induced menopause have greater sexual dysfunction with poor QoL impact
UGA Management

- Recognize it and ask about it
- Empathy and Understanding
- Treatment of underlying condition
- Advice regarding lubricants and moisturisers
- Vaginal oestrogens
- Ospemifene
- DHEA
- Vaginal laser

DON’T
- Give repeated course of anti-fungal agents
- Give anti-depressants
- Ignore it!
## Treatment Options for UGA

### Vaginal

<table>
<thead>
<tr>
<th>Lubricants and Moisturisers</th>
<th>Wide variety of products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estrogen preparations</td>
<td>Gold standard, NICE recommended</td>
</tr>
<tr>
<td>DHEA</td>
<td>12 month data</td>
</tr>
<tr>
<td>Vaginal Laser</td>
<td>Preliminary data promising but invasive</td>
</tr>
</tbody>
</table>

### Systemic

<table>
<thead>
<tr>
<th>Estrogens</th>
<th>Upto 25% women do not get relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ospemifene</td>
<td>Oral preparation that targets vagina. 12 week data but longer FU</td>
</tr>
</tbody>
</table>

VAGINAL OESTROGENS

Are Effective – first line treatment
• Improve discomfort
• Improve sexual function
• Improve bladder symptoms and RUTI

Are well tolerated
• No increase in serum oestradiol levels

Are Safe
• No need for progestogens even on long term Rx
• No evidence of any increased Breast Cancer risk

# Types of Vaginal Estrogen

<table>
<thead>
<tr>
<th>Tablet</th>
<th>Cream</th>
<th>Pessary</th>
<th>Ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small, easy to insert, licensed for <strong>long term</strong> use</td>
<td>Helpful if vulval irritation but can be “messy”. Licensed 3-6 months</td>
<td>Estriol 0.03mg Low dose Easy to insert No plastic</td>
<td>Vaginal ring which remains in place for 3 months. Convenient. Licensed for 2 years</td>
</tr>
<tr>
<td>Nightly for 2 weeks then twice weekly</td>
<td>Nightly for 2 weeks then twice weekly</td>
<td>Nightly for 3 weeks then twice weekly</td>
<td>Changed 3 monthly</td>
</tr>
<tr>
<td>Vagifem 10 (estradiol)</td>
<td>Ovestin (estriol)</td>
<td>Imvaggis (estriol)</td>
<td>Estring (estradiol)</td>
</tr>
</tbody>
</table>

All vaginal oestrogen products are effective in relieving symptoms of vaginal atrophy and have peak plasma levels < 20pmol/l
NICE Guidelines UK 2015

“Offer vaginal oestrogen to women with urogenital atrophy and continue treatment for as long as needed to relieve symptoms. If vaginal oestrogen does not relieve symptoms, consider increasing the dose ....”

IMS recommendations on Postmenopausal Vaginal Atrophy 2012

“Treatment should be started early and before severe atrophic changes have occurred

IMS Global Consensus Statement on HRT 2016

BMS Consensus Statement on Urogenital Atrophy 2021

NAMS Position Statement on Hormone Therapy 2017

Ospemifene

- Selective Estrogen Receptor Modulator
- Initially developed for the treatment of osteoporosis
- Oral preparation, 60mg daily (Senshio)
- Licensed for moderate to severe vulvo-vaginal atrophy
- Improves dyspaerunia and sexual function (FSFI)
- Efficacy data from 2, 12/52 studies and a 1yr study
- 1-year safety data

Change from baseline to week 12 in FSFI domain scores

DHEA (dehydroepiandrosterone)

- Intravaginal DHEA licensed for moderate to severe VVA (Prasterone 6.5mg daily)
- DHEA is activated intra-cellularly into oestradiol and testosterone
- 95% inactivated locally resulting in no increase in systemic levels
- 12 week studies have shown significant improvement in vaginal maturation, pH, atrophy and pain at sexual activity
- Improvements maintained up to 52 weeks
- No endometrial stimulation or increase in estradiol or testosterone serum levels above normal post-menopausal levels at 52 weeks

2 Different types of laser
   • fractionated CO2 laser
   • Erbium (Er:YAG) laser
> 90 Prospective Studies, 4 RCT
   • 1 placebo (sham device) trial
   • Small studies
   • Short duration (max 18 months)
   • Mainly around efficacy on VVA
   • RCTs under way
   • Ongoing trials on mild USI
   • NICE Guidelines 2021

Urinary Incontinence (UI) Types

Defined as “any involuntary leakage of urine”

- **Overactive Bladder (OB):** urge Incontinence with urgency, frequency and nocturia
- **Stress Urinary Incontinence (SUI):** UI on exertion, sneezing or coughing
- **Mixed:** both

Impact:

- Quality of life: loss of self esteem, desire to normalise
- Other co-morbidities e.g. hip fracture, depression
- Cost – personal, social care and healthcare
### Incidence of Urinary Incontinence by age

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Stress</th>
<th>Mixed</th>
<th>Urge</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70-74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80-84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85-89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hannestad YS et al. *J Clin Epidemiol* 2000; **53**: 1150–1157
Initial Assessment and Management of Urinary Incontinence

Haematuria – refer
UTI - treat

Clinical assessment, MSU, Vaginal Exam

Pelvic mass - refer

PREDOMINANT SYMPTOM

Stress Incontinence
Mixed symptoms
Urgency, urge incontinence

Pelvic Floor Re-education
Persistent Symptoms
Bladder Retraining +/- anticholinergics

SPECIALIST REFERRAL

Guideline prepared on behalf of Dorset Uro-Gynaec Group based on NICE recommendations Jan 2014 Enquiries: tim.hillard@poole.nhs.uk
Management of Overactive Bladder

General:
- Fluid restriction (1500 mls/day)
- Avoid caffeine, alcohol etc.
- Weight loss if BMI > 30
- Physiotherapy
- Self care package

Medication/Surgery:
- Anti-muscarinics
- Mirabegron
- Oestrogens (Vaginal)
- DDAVP (Desmopressin)
- Botulinum Toxin
- Sacral nerve modulation
Botulinum Toxin

Intra-vesical Injections Botulinum Toxin A
• Can be done under local anesthetic
• 20-30 sites, sparing the trigone
• 100 Units for OAB
• 200 Units for neurogenic bladder

• Efficacy 60-75%
• Effects last up to 12 months
• Retention rate 7-10%
• Learning ISC a pre-requisite
• Now offered for refractory OAB

RCOG Scientific Impact Paper 42 2014
NICE NG123 April 2019
Management of Stress Incontinence

Conservative – pelvic floor re-education

Medical – Duloxetine (limited role)

Surgical –

- Office based  e.g. bulking agents
- Day case     e.g. mid-urethral slings
- Major surgery e.g. colposuspension/slings/AUS artificial sphincter

Benign Condition - “first do no harm”

NICE NG123 April 2019
THE CHANGING FACE OF INCONTINENCE SURGERY

• MUS (TVT) procedure of choice
• Millions of procedures performed
• Overall satisfaction very high

BUT
• Number of women have had significant long-term complications e.g. pain
• Strong social media campaign backed by some politicians
• Use suspended in July 2018 pending Cumberlege review
• Shift towards more invasive surgery or “put up with it!”

Source: BSUG Database
Where do we go from here?

Emphasises the need to maintain high clinical standards & governance

Surgeons who perform procedures for UI should:
• Have appropriate training and work in a multi-disciplinary team.
• Provide detailed and appropriate consent (PDA)
• Maintain careful outcome data (BSUG/IUGA database)
• Recognise and report complications

Work with patients to provide full choice of procedures

Establish evidenced based multi-disciplinary mesh removal centres
PROLAPSE

- Weakness of the pelvic supports resulting in descent of some or all of pelvic structures
- Intervention depends on impact of symptoms and nature of defect

- Anterior compartment (cystocele/urethrocele)
- Posterior compartment (rectocele/enterocele)
- Mid compartment (uterine/vault)
Prolapse: Modern Management

Conservative:
- Multi-disciplinary approach
- Physiotherapy
- Pessaries
- Correlate with functional problems

Surgery:
- Site specific repairs (vault)
- Laparoscopic approach
- Utilisation of Mesh (abdominal only)
- Concentration of expertise
- Appropriate Governance
- Outcome data (BSUG)
SUMMARY
Pelvic Floor Health in Menopausal Women

• Pelvic Floor Problems are common amongst menopausal women and can have a major impact on their quality of life.

• Many can be improved with simple measures and advice.

• Correcting uro-genital atrophy should always be considered.

• Vaginal oestrogens are first line but other options available.

• Symptoms of urinary incontinence and prolapse can be debilitating and life changing.

• Medication remains 1st line treatment for overactive bladder.

• Selection of a surgical procedure should only be considered if conservative therapy has failed and in full consultation with the woman and as part of a multi-disciplinary urogynaecology team.
Pelvic Floor Health in Menopausal Women

THANK YOU

Annual Scientific Meeting
June 30th July 1st 2022
Kenilworth

Scientific Meeting
October 26-29th 2022
Lisbon