

MENOPAUSE

PELVIC FLOOR & BONE HEALTH

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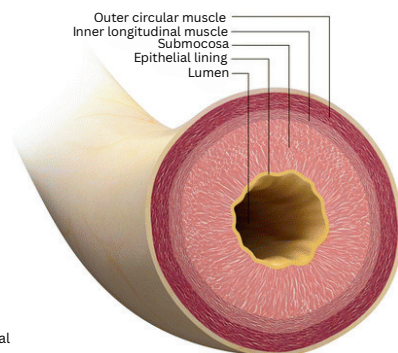
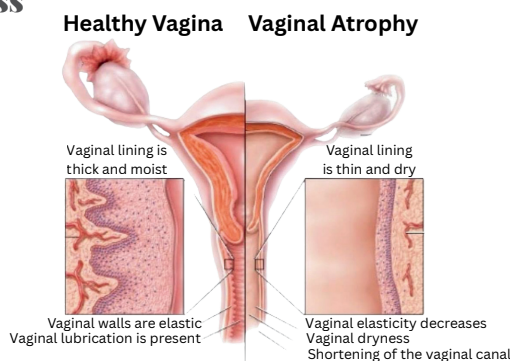
Beyond hot flushes and mood changes, menopause has important implications for women's pelvic health. Declining oestrogen levels may reduce the strength and integrity of pelvic floor tissues, contributing to a higher risk of urinary incontinence and prolapse. Vaginal and urinary tissue changes (Genitourinary Syndrome of Menopause - GSM) may cause dryness, pain, or recurrent urinary symptoms. The resultant loss of oestrogen accelerates bone loss, raising the risk of osteoporosis and fractures. These changes highlight that menopause is not solely a reproductive milestone but a whole-body health transition that requires proactive, evidence-informed care.

Physiological Effects of Oestrogen Loss

- **Muscular:** Decreased muscle fibre size, tone, and contractility
- **Connective tissue:** Reduced elasticity of ligaments and fascial support
- **Urogenital tissue:** Thinning of vaginal epithelium, dryness, and discomfort due to vulvovaginal atrophy

Functional Effects of Oestrogen Loss

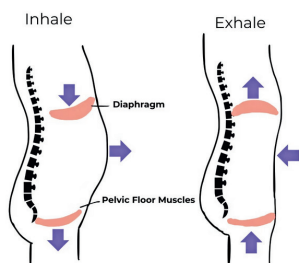
- Urinary incontinence
 - loss of pelvic floor support
 - altered sphincter function
 - reduction in urethral closure pressure
- Faecal incontinence
 - thinning of mucosa
 - altered sphincter function
- Pelvic organ prolapse (POP)
 - loss of fascial support
- Dyspareunia (painful intercourse)
- Pelvic or lower back pain



Urinary Incontinence

Management of Urinary Incontinence

- Pelvic floor muscle training: Effective for managing stress urinary incontinence (SUI), urge urinary incontinence (UUI), urgency, nocturia
- Managing intra-abdominal pressure (IAP):
 - Address constipation and chronic cough
 - Train breath coordination and lift technique
 - Teach "the knack": coordinated, timed contraction
- Vaginal pessaries:
 - Silicone devices for structural support
 - Individualised by size and shape for different prolapse types and symptoms



Management of Urge Urinary Incontinence

- Bladder retraining strategies
 - timed/ scheduled voids
- Dietary and fluid modifications (too much or too little)
- Reduce bladder irritants (eg. caffeine, fizz, alcohol)
- Teach urge suppression techniques
 - mental tasks (eg. counting backwards from 100 by 7's)
 - physical tasks (eg. toe curling, calf raises, sitting down, pelvic floor pressure)

Multimodal Management

- Pharmacological management when indicated
- Surgical referral if conservative treatment is not sufficient in reducing symptoms
- Collaborative care between physiotherapists and GP/medical teams

Pelvic Organ Prolapse

Descent of one or more pelvic organs (bladder, uterus, rectum) into the vaginal canal due to weakened muscular and connective support structures.

Contributing Factors:

- Childbirth +/- trauma
- Oestrogen deficiency (affecting tissue integrity)
- Repetitive straining or chronic coughing

Clinical Symptoms:

- Sensation of dragging, bulging or heaviness in the vagina
- Urinary or faecal incontinence
- Not fully emptying the bladder or bowel
- Constipation
- Recurrent UTIs
- Dyspareunia (pain with intercourse) or reduced sensation with intercourse
- Lower back pain

Lifestyle modifications

- Pressure management (BMI, breathing mechanics, lifting technique)
- Manage constipation and chronic coughing
- Beneficial when combined with other conservative management options

Vaginal support pessaries

- Can be used in combination with other non-surgical management options
- The use of a pessary reduces symptoms in 85% of patients
- Prolonged pessary use may significantly improve quality of life

Pelvic floor muscle training

- Optimal pelvic floor function may improve and manage symptoms
- May prevent the need for surgery
- A program of supervised pelvic floor muscle training for at least 16 weeks is recommended as a first option for women with symptomatic POP-Q stage 1 or 2 prolapse, with continuation if beneficial

Topical oestrogen

Oestrogen therapy can be useful to:

- Reduce vaginal dryness
- Improve the tissue quality of a prolapsed vaginal wall
- Thicken the lining of the urethra - increasing urethral closure pressure

Outer pelvic strengthening

- Strengthening the muscles around the pelvis may aid in reducing POP symptoms
- These muscles can include the superficial and deep hip muscles, quadriceps, hamstrings and adductors

Surgical treatments

- May be indicated where non-surgical management has failed
- Approximately 1/3 of women have recurrent prolapse following surgery
- Optimising pelvic floor muscle function before and after surgery is strongly recommended to support the best outcomes

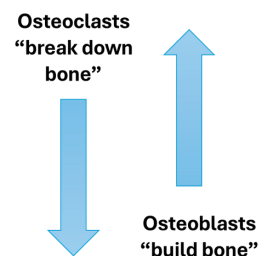
Bone Health

Loss of oestrogen during menopause is a primary factor affecting bone health, leading to rapid declines in bone density and increasing the risk of osteoporosis.

→ 10% loss of bone mass in first 5 years

→ High incidence of fragility fractures

→ Significant morbidity, mortality, reduced QoL



Exercise as Management

1. Weight-Bearing Impact

- Examples: jogging, dancing, jumping, and racket sports
- Frequency: most days of the week, 50 ground contacts

2. Progressive Resistance Training:

- Examples: bodyweight, free weights/machines, resistance bands
- Intensity: High-intensity. Ideally >70% of 1 Repetition Maximum (1RM)
- Frequency: 2-3 times per week, with adequate rest

3. Balance Training:

- Static, dynamic, progressing surfaces/base of support

Role of Physio

- **Ensure safety:** screen for contraindications and risk factors and tailor programs for comorbidities
- **Maximise efficacy:** provide high-intensity, progressive programs that are supervised and monitored
- **Improve adherence:** empower patients through education and support to make exercise a lifelong habit
- **Improve patient outcomes and QoL:** improve physical function, reduce pain and increase confidence to enhance quality of life
- **Ensure holistic patient care:** combining knowledge provides a comprehensive approach to patient care

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