Childbirth Trauma
and an ageing population

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Outline

- Childbirth trauma
- Ageing population
- Menopause
- Continence Service Audit
- Where to from here
Case Study

- 65 year old female
- Nocturnal enuresis until 13
- Urinary urgency – lifetime
- SUI – approx. 35 years
- UUI – 10 years, worsening
Case Study

- G3P2
  - 2 x NVD
  - second babe 10lb8, tearing + stitches
- T2DM
- Vaginal hyster & urethral sling 2008
- Retired, active lifestyle
Urodynamic Studies 2014
- poor bladder compliance
- rise in detrusor pressure
- reduced bladder capacity 280ml
- marked leakage during filling
- leakage with coughing at capacity

Trialled Ditropan, Vesicare, Oxytrol patches and now going well on Betmiga
Pelvic Floor Lifespan

Figure 1. Integrated lifespan analysis of pelvic floor function
This graphical display of the abstract concept of pelvic floor function tracks the functional reserve throughout different phases of a woman’s lifespan. Initially, pelvic floor structure growth in late teens leads to a fully developed pelvic floor. Vaginal birth affects pelvic floor function. Finally, age-related deterioration occurs until a symptom threshold is reached where the functional reserve present earlier in life is lost. (© DeLancey 2007)
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Continuum of care

Prevention  Screening  Diagnosis  Treatment  Follow up
Vaginal Childbirth

- Unassisted
- Assisted
  - Amniotomy
  - Episiotomy
  - Induction
  - Vacuum extraction
  - Forceps delivery
Childbirth Stats

- 309142 births in 2017
- 2016
  - almost 30% 1st time mothers had caesarean
  - 1 in 4 (selected) vaginal births had instrumental assistance
  - 1 in 5 without instruments had episiotomy

Australian Institute of Health and Welfare
Vulval anatomy
Childbirth Trauma

Childbirth Perineal Tears

Grade 1: PFM is not torn

Grade 2: PFM is torn

Grade 3: PFM is torn to anus

Grade 4: PFM is torn into anus
Levator Avulsion
Levator Avulsion

- Form of birth trauma
- 10-35% occurrence in first vaginal delivery
- Impairs pelvic organ support
- Associated with POP
  - Enlarges the levator hiatus
Risk Factors

- Obstetric anal sphincter injuries
- Prolonged active second stage of delivery
- Forceps delivery
- Fetal head circumference
- Episiotomy
- Increased maternal age
Screening

- LAM tear often unrecognised
- Important to diagnose
  - Increase risk of Urogenital issues
- Digital palpation or Ultrasound
  - MRI in research
Treatment

- Recovery in first 12 months post partum
  - Muscle vs oedema vs bone

- Pelvic floor muscle training

- Defecation dynamics

- Lifestyle and exercise advice

- Pessary use
Population Statistics

- 25 million Australians
- 15% aged 65 and over and increasing
- 3 in 10 born overseas
- Higher proportion female
  - 65-74 (51%)
  - 75-84 (54%)
  - >85 (63%)
- Increasing obesity
- Sea change lifestyle

Australian Bureau Statistics (ABS)
Ageing Impact

- Muscles change as we age
- Loss of muscle mass and strength
- Known as Sarcopenia
- Muscle fibre changes
- Ageing plus vaginal birth…
Menopause

- The last period at the end of reproductive years
- Most women reach between 45 & 55
- Oestrogen production slows as ovulate fluctuates
- Not all women experience symptoms
  - Night sweats
  - Vaginal dryness
  - Reduced libido
  - Urinary frequency
Impact of Menopause

- Oestrogen receptors in mucosa and smooth muscle of bladder
- Mucosal changes
  - Thins
  - Atrophies
- Urogenital smooth muscle changes
  - Tone
  - Strength
Know what?

So what?

Now what?
Audit

- Small audit of Urodynamics clients
  - Female
  - >64 years

- N = 13

- Results – almost all significant birth Hx
Audit – birth Hx

- G4P3 - epis, heaviest 3.1kg
- G4P4 - heaviest >9lb
- G5P5 - heaviest 8lb 15oz
- G2P3 - twin was breech
- G2P2 - tore with many stitches
- G3P3 - forceps
- G5P4
Assessment

- Childbirth history
  - Type and number of births
  - Trauma
  - Healing
  - Early post-partum symptoms

- Menopause
  - When
  - Symptoms
Assessment

- Physical examination
  - Skin integrity
  - Scarring
  - Muscle strength and function
  - Levator ani muscle attachments
  - Prolapse
Management

- Compounding changes to Urogenital function
- Take note those with Hx of traumatic childbirth
- Educate
  - Acceptance of ‘this is expected’ mantra
Barriers

- Life-stage barriers
- Reluctance to talk about sensitive issues
- Unaware of treatment options
- Physical access
What can we do?

Prevention  Screening  Diagnosis  Treatment  Follow up
Take home message
References


- Sue Croft Physiotherapist Blog https://suecroftphysiotherapistblog.com/2018/10/07levator-avulsion-it-doesn’t-have-to-be-the-end-of-the-world-as-you-know-it/