CASE THREE

Short case number: 3_29_03
Category: Endocrine and Reproductive Systems
Discipline: Obstetrics & Gynaecology
Setting: General Practice-Urban
Topic: Vaginal laxity and prolapse of the reproductive organs

Case

Anita Taylor is 55 years old. She presents complaining that she can feel 'something dropping down below'. It is worse when she has been standing for a while or if she has to strain to pass faeces. This has become more of a problem recently as no matter what she does, she does not seem to be able to completely empty her bowel.

Questions

1. You are concerned that Anita may have a prolapse of the urogenital tract, in particular affecting her bowel. Explain the anatomy of the pelvic floor and describe the abnormalities that can occur with prolapse of the reproductive organs. What symptoms may be experienced by women with prolapsed of the urogenital tract? What key features would you explore on history and why?
2. On examination you find that Anita has a rectocoele and grade 1 uterine prolapse on straining. Describe the grades of uterine prolapse and anatomical landmark used to define the grades. Describe the abnormalities seen with cystocoele and rectocoele.
3. Outline the use of vaginal pessaries in the management of uterine prolapse. What other measures would you recommend to women with symptomatic prolapse?
4. Because of the presence of the rectocoele you discuss referral to a gynaecologist for surgical management. Outline the surgical management of uterine prolapse, including the indications, contraindications and complications.

Suggested reading:

1. Abbott, J., Bowyer, L., & Finn, M. (2014). *Obstetrics and Gynaecology: an evidence-based guide (2nd ed).* Australia, Elsevier
2. Dewhurst's Textbook of Obstetrics & Gynaecology, Edmonds K [editor]. Blackwell Publishing. 2007. Chapter 48. Pg 496-503

ANSWERS

1. You are concerned that Anita may have a prolapse of the urogenital tract, in particular affecting her bowel. Explain the anatomy of the pelvic floor and describe the abnormalities that can occur with prolapse of the reproductive organs. What symptoms may be experienced by women with prolapse of the urogenital tract? What key features would you explore on history and why?

Anatomy of the pelvic floor: The pelvic floor supports the pelvic and abdominal viscera and helps maintain control of their contents – there are two main components which are interdependent –the muscle and connective tissue including the endopelvic fascia and ligaments. The levator ani muscles (part of the pelvic floor muscles)are striated muscles and are under voluntary control. They have a resting tone which can be strengthened with physiotherapy. They play an important role in continence and visceral support.

Fascia envelopes the levator ani muscle complex, attaches it to bone at its origin, the arcus tendineous, pubic bone, sacrum and coccyx. The fascial attachments condense in some areas and are often referred to as ligaments eg uterosacral and cardinal ligaments, which support the uterus at the peri-cervical ring.
Weakness of the pelvic floor can be due to an impairment in function of the muscles or fascia.

Abnormalities that can occur with prolapse of the reproductive organs:
Direct trauma or gradual weakening/atrophy of the pelvic floor muscle, fascia or nerve supply are increased with vaginal delivery, particularly if there has been an active second stage of labour which is prolonged, an instrumental injury or large foetus. As time goes on, childbirth factors become less important while other factors such as obesity, menopausal status and lifestyle (work, bowel habits) make a greater contribution.

Key features on history:

- Childbirth – should consider methods (assisted vaginal delivery; forceps or vacuum) as well as birth weight and length of second stage
- Lifestyle issues- obesity, chronic cough, constipation, habitual lifting of heavy loads
- Age / postmenopausal
- Previous pelvic surgery
- Inherited risk

Presenting symptoms:

- Feeling of lump in the vagina, dragging sensation, low backache
- Bleeding and/or discharge from an ulceration
- Urinary symptoms:

Voiding difficulty (may be due to large cystocele and urethral kinking)
Urgency with or without urgency incontinence
Frequency
Stress incontinence

- Incomplete bowel emptying from a rectocele → may need to digitally replace the prolapse to defecate and micturate

2. On examination you find that Anita has a rectocoele and grade 1 uterine prolapse on straining. Describe the grades of uterine prolapse and anatomical landmark used to define the grades. Describe abnormalities seen with a cystocoele and rectocoele.

Grades of uterine prolapse

- A first degree uterine prolapse descends to 1 cm above the hymen.
- A second degree uterine prolapse descends from 1cm above to 1 cm below the hymen.
- A third degree prolapse- further
- A fourth degree prolapse when the uterus is completely outside the vagina (procidentia) with vaginal eversion.

Cystocoele: anterior vaginal wall prolapse – descent of the front wall of the vagina often with the bladder behind. Can describe as small, moderate or large. Can also use POP-Q method.*

Rectocoele: posterior vaginal wall prolapse- descent of the posterior vaginal wall often with the rectum protruding (bulges forward) into the vagina. Can describe as small, moderate or large. Can also use POP-Q method.*

Uterine prolapse – is descent of the uterus

Vault prolapse; is descent of the vaginal vault and may occur in women who have had a hysterectomy. There is frequently small bowel behind a vault prolapse in which case it is called an enterocoele. This name may also be given to prolapse of the upper part of the posterior vaginal wall ie with the uterus still in situ.

3. Outline the use of vaginal pessaries in the management of uterine prolapse. What other measures would you recommend to a woman with symptomatic prolapsed?
Non-surgical management suitable for women who are unfit for surgery or wish to delay surgery.

Pessaries are plastic rings, balls or more complex structures that are inserted vaginally to prevent the descent of the pelvic organs. They are usually exchanged every 3 – 4 months (although the optimal time for changing has not been defined) and after menopause local

oestrogen is often used to prevent ulceration. Most commonly used is a polypropylene ring pessary.

Other important measures include:

- Pelvic floor exercises guided by a physiotherapist. This is particularly useful in premenopausal women.
- weight loss
- treatment of exacerbating risk factors such as smoking, cough, lifestyles involving heavy lifting, treatment of chronic constipation.
- vaginal oestrogen cream to improve tissue quality.

4. Because of the presence of the rectocoele you discuss referral to a gynaecologist for surgical management. Outline the surgical management of uterine prolapse, including the indications, contraindications and complications.

Surgical management of uterine prolapse: can be undertaken by vaginal surgery – vaginal hysterectomy. Anterior and posterior colporrhaphy may be done at the same time if there is a cystocoele and rectocoele present. (Colporrhapy aims to repair defects in the fascia supporting the anterior and posterior vaginal walls. In addition the mesh may also be inserted to buttress the fascia but this is now rarely used and only with specific authority.
Vaginal hysterectomy would be the current conventional approach to uterine prolapse in women who no longer want children. Abdominal or laparoscopic surgery is often used for recurrent prolapse, when mesh is used to lift the vault to the sacrum (sacrocolpoplexy). Laproscopic surgery may also be carried out in specialised units for primary correction of prolapse or incontinence.

Indications → prolapse does not pose a threat to life but does affect quality of life. Treatment depends on symptoms, level of medical fitness and wish for fertility.

Contraindications → In patients who are non-symptomatic but have objective prolapse. Success of surgery likely to be limited by issues such as chronic cough from smoking, previous surgery, connective tissue disorders, excessive weight, increased age and chronic conditions.

Complications → risk of recurrence (high) and of subsequent vaginal vault prolapse, haemorrhage, damage to bladder, bowel and ureters. Mesh erosion and pain (if used).

*The Pelvic Organ Prolapse Quantification System (POP-Q) refers to a system of the International Continence Society for describing, quantifying, and staging pelvic support in women. Further information is available at: https://www.racgp.org.au/afp/2015/july/pelvic-organ-prolapse-%E2%80%93-a-review/