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The incidence of pelvic organ prolapse is increasing with longevity. The management options are watchful expectancy, offering conservative treatment such as physiotherapy and vaginal pessaries or surgery. The choice of management is influenced by symptomology, impact on quality of life, desire for sexual function and medical comorbidities. The aim of any intervention should be to improve functional disability and not to restore anatomical perfection.

Clinicians, tasked with the care of elderly women have to be aware of rectal prolapse. Dr Dean Lutrin highlights the risk factors and management options.

As primary care doctors have the opportunity of seeing patients in early menopause, it is important to effectively manage constipation; a definite predisposing factor for rectal prolapse. The results of surgery for rectal prolapse have improved and careful selection of patients is vital for long term success.

Dr Trudy Smith has highlighted a sometimes forgotten tool in the management of pelvic organ prolapse in her paper on vaginal ring pessaries. The side effects associated with vaginal pessary are usually minor and include vaginal discharge, odour and vaginal erosions. Factors predicting failure of pessary treatment are short vaginal length, deficient perineal body and a wider vaginal introitus.

Physiotherapy is an integral part of the holistic management of any patient with pelvic organ prolapse. Hester van Aswegan’s brilliant paper highlights the role of physiotherapy as part of conservative management, and an often forgotten use, the need for physiotherapy especially post operatively. Proper breathing techniques are needed for optimal pelvic muscle function. Physiotherapy can be considered a safe and effective treatment intervention.

Professor Athol Kent in Menopause Matters discusses the controversies surrounding the management of osteoporosis. Evidence based guidelines are what all responsible clinicians adhere to in their daily management of patients. The multiple benefits of exercise are highlighted. The papers quoted raise questions about the validity of treatments and supplements used in the management of osteoporosis. I invite comment on the above topic.
Rectal prolapse

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Rectal prolapse is a full thickness transanal protrusion of all the layers of the rectal wall. It is a well recognised surgical pathology that has been described since antiquity. It is more common than acknowledged and can have a significant negative impact on a patient’s quality of life.

Pathophysiology

Rectal prolapse occurs as a result of a weakness either in the pelvic floor or in the rectum itself. The usual lead point is the anterior rectal wall. It occurs either as a sliding hernia through a defect in the pelvic floor or as a result of an internal intussusception of the rectum that progresses to a full thickness external rectal prolapse.

Clinical Approach

It is important to ascertain whether the patient truly has a rectal prolapse. Circumferential anal mucosal prolapse and large haemorrhoids are occasionally confused with rectal prolapse. A careful history from the patient will help identify the patient risk factors and nature of the symptoms. The patient’s obstetric history is particularly relevant and will help determine what sort of pelvic floor damage may be present. Additionally, a history of urinary incontinence or other bladder symptoms may augment the surgical approach. Some patients will have a photograph of the prolapse on a cell phone that gives the doctor certainty as to the nature of the pathology. Other patients may have some difficult describing what they are experiencing.

The patient’s general medical history, and the extent and severity of their comorbidities provide important guidance as to what operation is most suitable for the patient. For example, significant pulmonary dysfunction may preclude laparoscopic surgery.

Most patients should have some form of imaging of their colon prior to an operation for rectal prolapse. Optical colonoscopy is the gold standard, but CT colography or a contrast enema are often suitable alternatives.

Many patients who present with pelvic floor prolapse may have had one or more operations before. Previous mesh insertions are of particular relevance when planning surgical repair of a rectal prolapse.

The use of adult diapers or pads gives useful information about the incontinence symptoms that the patient may be experiencing.

Some patients may be able to demonstrate the prolapse whilst in the examining room and others may not. It is imperative to see the prolapse prior to planning an operation. Some patients can go to the toilet and push it out for the doctor to see. Some patients will need to take a photograph of it to show the doctor - especially if it reduces spontaneously after defecation.

When examining the patient one should document the size of the prolapse and the state of the sphincter complex and perineal body. The presence of perineal descent, vaginal vault prolapse, or bladder prolapse should be noted.

Clinical Presentation

Rectal prolapse commonly affects older women although it occurs in men and women of any age. Patients with rectal prolapse most commonly complain about the presence of the prolapse itself. Other symptoms include pain, a mucoid anal discharge, fecal incontinence, obstructed defecation, and constipation. The prolapse often comes out with defecation and reduces spontaneously or with digital assistance. Occasionally the prolapse emerges unexpectedly during routine day to day activities. Rectal prolapse is not a solitary condition but includes a range of presentations that may not necessarily involve a full thickness prolapse. A patient with an internal rectal prolapse (IRP) may describe many of the above symptoms before the external prolapse becomes readily apparent. Additionally, rectal prolapse may occur in conjunction with middle and anterior compartment prolapse. Emergency presentations occur when the prolapse is irreducible or incarcerated.

Risk Factors

The typical patient with rectal prolapse is an older female who has had a hysterectomy and a number of natural deliveries. Young people who present with rectal prolapse may have a congenitally peritonealised pelvis that puts them at risk for prolapse. Chronic constipation and straining may cause weakening of the pelvic floor that leads to rectal prolapse. Some patients have no obvious clinical risk factors for prolapse and their condition may be explained by the presence of either subtle or overt congenital collagen and connective tissue disorders. A history of childhood hypermobility often suggests that the patient has inherently weaker collagen.
The nature and extent of scars on the abdomen helps one decide as to the feasibility of abdominal approaches to surgical repair.

Special investigations

A defecogram is important in patients with internal rectal prolapse. In patients with a full thickness external rectal prolapse, it is less important. The defecogram also give valuable information about the middle and anterior compartments.

Endoanal ultrasound often reveals a thinned out and damaged sphincter complex. This baseline information gives the clinician and patient useful prognostic information regarding continence.

Urodynamic studies are less relevant in rectal prolapse but urinary incontinence occasionally coexists with rectal prolapse and may need to be managed concurrently or sequentially.

Treatment approach

Conservative measures, such as avoiding straining with defecation or increasing dietary fibre intake can have a profoundly beneficial effect on the patient’s symptoms. In young patients with rectal prolapse and pelvic floor dysfunction, biofeedback can provide considerable relief of the symptoms and can even get the patient to the stage where an operation can be avoided.

In frail elderly patients with a reducible rectal prolapse, it is sometimes prudent to advise the patient not to have an operation. These women have often had the prolapse for many years and have learnt to cope with it. The incidence of incarceration is very low and these patients can safely be observed.

Surgical options

Operations for rectal prolapse are broadly divided into abdominal procedures and perineal procedures. Generally, the abdominal operations have higher success rates but are more physiologically demanding. There are over 100 various operations described to repair rectal prolapse. There is no perfect operation and an awareness of the advantages and disadvantages of each operation allows an informed decision as to what is the most appropriate approach for each specific patient.

Perineal procedures

An Altemeier procedure or perineal proctosigmoidectomy (PPS) is an operation where the prolapsed rectum is resected transanally and a colo-anal anastomosis is performed. It is often performed in conjunction with a levatorplasty. It can be performed under spinal or general anaesthesia and is often a good option for those patients who cannot tolerate general anaesthesia. Since it involves a bowel resection and anastomosis, there is potential for sepsis and anastomotic leaks. Loss of the rectal reservoir with the PPS may lead to increased stool frequency and even incontinence. A longstanding prolapse may have damaged the sphincter complex by progressively dilating it. The resulting incontinence can take up to a year to improve, and will persist for a significant number of patients. Further interventions for fecal incontinence are occasionally necessary.

A Delorme procedure is an operation where the prolapsing mucosa is removed and the rectal wall is plicated. This is useful for smaller prolapses where a PPS would be too difficult technically.

A Thiersch suture is an operation where the anus is encircled with a non absorbable suture in an attempt to mechanically prevent the rectum from prolapsing. It has a high failure and complication rate and should be reserved for patients who are not fit for anything more.

Abdominal procedures

A number of options are available when performing abdominal surgery for rectal prolapse:

- Open vs laparoscopic surgery
- Whether to perform a concurrent bowel resection (usually a sigmoidectomy)
- Placement of a mesh (synthetic or biological)
- Anterior or posterior rectopexy
- Whether to address middle and anterior compartment prolapse at the same time

The classical abdominal operation for rectal prolapse is the resection rectopexy, otherwise known as the Frykman-Goldberg procedure. This operation involves mobilising the rectum fully, securing the posterior aspect of the rectum to the sacral promontory, and performing a sigmoidectomy. It has a high short and long term success rate but is physiologically demanding and carries the risk of anastomotic complications.

Laparoscopy has revolutionised surgery for rectal prolapse. It has facilitated doing a safe, physiologically undemanding operation with the potential for a rapid return to daily life.

The laparoscopic ventral mesh rectopexy is an operation where the rectovaginal septum is opened completely and a mesh is secured distally to the ventral rectum and proximally to the sacral promontory. The vaginal vault can be sutured to the mesh as well thus reducing a vaginal vault prolapse and preventing an enterocele. A synthetic mesh is usually used and is more durable than a biological implant but has a slightly higher risk of mesh related sepsis. A sigmoidectomy is generally not performed as part of this operation. Posterior mobilisation and fixation of the rectum is not essential and performing it may worsen postoperative constipation.
Complications

Sepsis is the most feared complication of surgery for rectal prolapse. If an anastomosis has been performed either at the rectosigmoid junction or at the anorectal junction, it should be carefully monitored for signs of an anastomotic leak. Whilst uncommon, bleeding, injury to adjacent organs, small bowel obstruction, and ileus do occur after any of the operations for rectal prolapse.

Future directions

It is important to try and work out the specific risk factors for recurrent rectal prolapse after surgery so that operative techniques can be refined and improved to reduce these complications as much as possible. An understanding of collagen weaknesses may help guide women with decisions regarding natural childbirth and technique and timing of hysterectomy.

Postoperative care

Constipation is a significant complication of all of these procedures. It is a function of a disturbance of the rectal innervation. The constipation can last for 6-8 weeks after the operation and can be quite debilitating. The regular use of a polyethylene glycol based laxative for this period is helpful.

Bladder function usually improves in patients who have abdominal surgery for rectal prolapse with up to 70% of patients reporting an improvement in their symptomatology. Some patients have a significant deterioration in their bladder function which is usually only temporary. Should the bladder still prove problematic 6 months after the operation, further surgery (if appropriate) can be considered for the bladder.

Similarly, disturbances of sexual function can occur but are usually self limited.

If fecal continence has not improved sufficiently with non surgical measures one year after the operation, further interventions to try and improve continence should be considered. Sacral neuromodulation has a particularly useful role in this situation.

Management of recurrence

All of the operations for rectal prolapse have a recurrence rate, and none are perfect.9 Even in the best hands, up to 10% of patients will have a medium to long term failure of the repair. Failures of perineal surgery usually relate to insufficient amounts of bowel being removed. Failures of abdominal operations are usually the result of poor fixation of the mesh or sutures holding the rectum. Patients should be counselled at the outset about the risk of recurrence so that they seek help timeously.

Multidisciplinary care

Some patients will present with multi compartment organ prolapse. It may be appropriate in a select group of patients to have multiple specialists involved in one operation so that a complete pelvic floor repair may be performed in one setting.

References

5. Mehendale VG, Chaudhari NC, Shenoy SN. Devadhar’s operation for complete rectal prolapse: 25 years’ experience. Indian journal of ... [Internet]. 2004 Jan 1;1–3.
Pelvic organ prolapse is a common condition affecting up to 65% of postmenopausal women. Prolapse increases with advancing age and symptoms vary with little correlation to the degree of prolapse. The incidence in South Africa is unknown.

The first described device was by Hippocrates who placed a wine soaked half pomegranate into the vagina for prolapse. Intravaginal support devices are an alternative to surgery. These devices are placed in the vagina to support the vaginal walls. Pessaries are advantageous because they are minimally invasive and can provide immediate relief of symptoms. They can be used both therapeutically and diagnostically.

**Type of pessaries**

Pessaries are made of medical grade silicone and as a result are inert and cause no allergic reactions. Pessaries are classified as support pessaries, space occupying pessaries or incontinence pessaries.

**Support pessaries**

These lie above the pubic bone and sit in the posterior fornix. They include the ring pessary and the Shaatz pessary.

**The space occupying pessaries**

Include the cube, inflatoball pessary and the doughnut. These are used for severe prolapse where there is poor pelvic floor muscle activity.

The Gellhorn pessary is considered to be a combination of a support and space-occupying pessary.

**Incontinence pessaries**

These are designed to give added support to the anterior vagina and slightly constrict the urethra.

**Indications**

A pessary can be offered to all patients with either pelvic organ prolapse or stress urinary incontinence. It should be especially considered if:

- Patients refuse surgery
- The patient is not fit for surgery
- The surgery is delayed
- Previous surgery that has failed
- Pregnancy
- Patients desire future fertility

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**Ring pessary**

**Shaatz pessary**

**Cube Pessary**

**Donut pessary**

**Inflataball Pessary**

**Gellhorn Pessary**

**Ring pessary with support and continence knob at 12 o’clock**
In a study by Clemons, the acceptance rate varied between 42 to 100%. Patients often decline use for various reasons such as sexual activity or constipation and fear that it may fall out. Older women are much more likely to accept the use of a pessary.

**Contraindications**

- Local infection
- Previous vaginal mesh
- Latex sensitivity
- Non compliance

**Prolapse**

Most patients can be fitted with a pessary with a high degree of success. The bulging symptoms can be relieved in 70 to 90% and the pressure symptoms can be relieved in 29 to 49% of cases. If patients utilise the pessary successfully for 4 weeks, the success of continuation to 5 years is excellent. The ring pessaries may be open or covered. The covered ring pessary is to support the cervix. POP-Q stage 1 to 2 prolapse responds well to the use of the ring pessary. They can, however, also work in more advanced prolapse provided there is an adequate perineal body.

If the pessary falls out and does not remain in position then a stiffer pessary such as a shaatz or a Gellhorn or a space-occupying lesion such as a cube may be used.

The change in symptoms varies after fitting as documented by Fernando et al.

### Changes in symptoms after fitting a pessary

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<tr>
<th></th>
<th>Improvement</th>
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<td>Stress urinary Incontinence</td>
<td>22 to 45</td>
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<td>Urge incontinence</td>
<td>28 to 46</td>
<td>6 to 13</td>
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<td>Fecal incontinence</td>
<td>19</td>
<td>9</td>
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<tr>
<td>Frequency sexual activity</td>
<td>16</td>
<td>3</td>
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<tr>
<td>Voiding difficulties</td>
<td>39 to 53</td>
<td>4 to 14</td>
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<tr>
<td>Satisfaction of sexual activity</td>
<td>11</td>
<td>5</td>
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**Urinary Incontinence**

The use of incontinence ring has been reported to have a 55% success at 6 months. This, however, can decline with time and be as low as 16%. The reasons for failure include continuing discomfort and bleeding with the pessary falling out. There is little evidence that for stress incontinence pessaries are more superior to other treatments including pelvic floor exercises.

**Pregnancy**

Women who develop prolapse during pregnancy are at risk of developing urinary retention and the use of a pessary maybe helpful. An Arabin pessary has been used in patients to prevent preterm birth and cervical incompetence.

**How to fit a pessary**

Clearly successful fitting and continued use depends on adequate counselling and commitment from the patient. A good history should be followed with a comprehensive examination.

The size of the pessaries is determined by assessing the width of the vaginal canal by separating the 2 examining fingers. A fitting ring is usually used. The pessary is folded and the leading end lubricated and inserted. The anterior edge should be sitting above the symphysis. There should be a space between the lateral walls and the front of the vagina. The patient should then be asked to walk around and do activities such as squatting, bending and the valsalva manoeuvres.

Following fitting the patient should be seen in 2 to 4 weeks to check position and satisfaction. There are no set guidelines, but women whom are able to remove and replace their own pessary should remove it and wash it weekly. Women whom are unable to do self-care should be followed up every 3 months. The frequency of cleaning for the cube will vary among patients.

Pessaries should be washed with soap and water, rinsed and replaced. Patients should have a speculum examination 6 monthly to assess for epithelial erosions or ulceration.

**Complications**

The commonest complications that have been reported are erosions (8%) and vaginal infection (2.5%) as reported in a series by Hanson et al. Erosions are caused by local pressure and devasculisation of the vaginal walls. This occurs if the pessary is too large. It will result in bleeding odour and discharge. The pessary should be removed and left out and local estrogen used for 4 weeks. The long-term use of estrogen does not appear to be protective if the pessary is too tight. Vaginal discharge is common in patients that do not remove and wash the pessary frequently enough. Replens can decrease the incidence of discharge if used daily. Major complications are very rare and can include vesicovaginal fistulae, bowel fistulae and incarcerated passaries. It is important to stress to patients that frequent follow up and cleaning is necessary.
Conclusion

Treatment of pelvic organ prolapse and urinary incontinence with a ring pessary is inexpensive, safe and effective. Complications and contraindications are rare. A trial of pessary should possibly be offered to all patients.

References

3. Fernando RJ, Thakar R, Sultan AH, Shah SM, Jones PW. Effect of vaginal pessaries on
Pelvic organ prolapse (POP) is a common occurrence and some degree of prolapse is seen in up to 50% of parous women. Patients with prolapse can experience a variety of pelvic floor symptoms and treatment could include surgery, mechanical devices and conservative management. I am providing an overview of how physiotherapy can help the patient with pelvic organ prolapse.

The pelvic floor muscles (PFM), particularly the levator ani muscles, have a critical role in supporting the pelvic viscera and play an integral role in urinary, defecatory, and sexual function. During periods of increased intra-abdominal pressure (IAP), such as coughing or lifting, PFM activity is increased to prevent or limit rostral displacement of the floor, maintain the position of the bladder neck, and assist with urethral and anal closure.

Although the pelvic floor muscles are not the only support system for the pelvic organs – the ligaments, connective tissue and fascia also play a role - weakened or injured pelvic floor muscles can be a risk factor for developing prolapse.

Studies have shown that conservative management approaches, such as giving lifestyle advice and delivering pelvic floor muscle training (PFMT), can often be successful in cases of mild to moderate prolapse. Women with prolapse commonly have a variety of pelvic floor symptoms including:

- pelvic heaviness or a dragging sensation in the vagina
- a bulge or lump in the vagina
- lower back or pelvic pain
- bladder and bowel symptoms (e.g. slow urinary stream, feeling of incomplete bladder or bowel emptying, urinary frequency or urgent desire to pass urine)
- sexual dysfunction

The pelvic floor muscles may become weakened for many reasons, such as pregnancy and childbirth, ageing, menopause and surgery. Any situation that cause excessive pressure on the pelvic floor can also contribute to the development of POP – examples are obesity, chronic cough, chronic constipation, heavy lifting and straining.

The levator plate, the shelf on which the pelvic organs rest, is horizontal when the body is in a standing position and supports the rectum and upper two thirds of the vagina above it. Weakness of the levator ani may loosen the sling behind the anorectum and cause the levator plate to sag, opening the urogenital hiatus and allowing pelvic organ prolapse.

It is hypothesised that improving pelvic floor muscle function (strength, endurance and coordination) may improve the structural support for the pelvic organs because it elevates the levator plate as you hypertrophy the muscles. Peschers also showed that bladder neck descent is significantly less when women were asked to contract the pelvic floor prior to a cough than when coughing without contraction.

How can physiotherapy help?

Conservative management approaches, such as physiotherapy, are often suggested as first-line therapy in cases of mild to moderate prolapse. There is now some evidence available indicating a positive effect of PFMT for prolapse symptoms and severity. Physiotherapy treatment is considered safe and non-invasive and it can be an option before surgery is considered.

It has been shown by Diane F Borello-France et al that better pelvic-floor muscle function was associated with less severe prolapse and urinary symptoms. Jarvis , Hallam et al also concluded that routine pre- and post operative physiotherapy interventions improve physical outcomes and quality of life in women undergoing corrective surgery for urinary incontinence and/or pelvic organ prolapse.
A physical therapist who specialises in the treatment of pelvic floor dysfunction will be able to do a thorough assessment to determine the severity of the prolapse and presence of other associated bladder, bowel or pelvic dysfunction symptoms. This will include a physical examination, looking at the patient’s posture, back, abdominal muscles and probably an internal examination to assess the pelvic floor muscles. Based on the findings, a treatment programme will be compiled according to each individual’s specific needs. Physiotherapy can be done prior to surgery especially in mild cases of prolapse, but it can also benefit patients to have physiotherapy intervention post-operatively in order to optimise their recovery and prevent future complications or recurrence of the prolapse.

Although physiotherapy will not be able to return the prolapsed pelvic organ(s) to their original position, it can help to provide more support to the pelvic organs and give relief of symptoms from pelvic organ prolapse.

The goals of physiotherapy are to reduce the symptoms caused by the prolapse, improve pelvic floor support and help the patient return to normal function as well as experiencing improved quality of life. Treatment can include:

- education on lifestyle changes
- helping patients understand the various risk factors that might aggravate the prolapse
- teaching proper performance of pelvic floor exercises to optimise muscular function.

Good pelvic floor function – in other words - good muscle tone, strength and endurance, but also proper coordination and timing of the contraction, and sufficient ability to relax the muscles, is needed for optimal function. Care should be taken in overemphasising strength training and not teaching sufficient relaxation, as this often contributes to difficulty in bladder or bowel emptying or it can even exacerbate pain.

Hodges\(^6\) reported that the PFM contribute to both postural and respiratory functions and that there is a relationship between breathing dysfunction and pelvic floor dysfunction. Proper breathing helps to restore the optimal pressures needed to control movements and support the pelvic organs. Therefore we need to teach patients’ a correct diaphragmatic breathing pattern before we even start with PFMT.

Proper instruction to help patients understand the anatomy and function of the pelvic floor is essential as it has been shown that many women are unable to volitionally contract these muscles on demand. Depending on the findings from a physical examination of the pelvic floor muscles, various modalities such as manual or computerised biofeedback, neuro-muscular electrical stimulation, assistive devices such as vaginal cones together with a pelvic floor exercise programme might be used to help women regain active voluntary control of the muscles.

It is also useful to teach pelvic floor muscle bracing against increased intra-abdominal pressure (e.g. lifting, coughing) - a technique called “the KNACK”. This not only helps to provide better support to the pelvic organs but also assists in postural education and pelvic and core stability necessary for everyday activities.

Although most studies have only looked at teaching “the Knack” for patients with incontinence, it seems logical to find a way to help women with POP to counteract intra-abdominal pressure increases - as we know it to be a risk factor for developing POP. Carrière\(^14\) recommends pre-contracting the pelvic floor muscles not only during a cough but for any daily task that results in increased intra-abdominal pressure. Thus, it is possible to apply the principle of “the Knack”, or pre-contracting the pelvic floor muscles with any rise in intra-abdominal pressure, to many activities such as coughing, sneezing and lifting to prevent descent of the bladder neck and possibly other pelvic organ structures.\(^15\)

Patients also have to understand proper body mechanics with lifting and functional activities to reduce the strain on the pelvic organs. Other strength deficits of the lumbopelvic region and lower extremities that may be contributing to the problem has to be identified as well. Biofeedback is a neuromuscular re-education tool therapists can use to assist patients to identify their pelvic floor muscles and to develop conscious control.

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![Fig 2. Image courtesy of the Continence Foundation of Australia.](http://www.continence.org.au/)
of the muscular action, especially in the patient with very weak muscle action or poor sensation. It can also benefit the patient with pelvic floor dyssynergia resulting in defecatory disorders – we often see these patterns in patients with pelvic organ prolapse.

Basotti et al\textsuperscript{16} showed in a clinical review on biofeedback that more than 70% of adult patients complaining of pelvic floor dyssynergia are likely to benefit from biofeedback training. Other randomised controlled trials have now established that biofeedback therapy is not only efficacious but superior to other modalities.\textsuperscript{17,18}

The goal of neuromuscular training using biofeedback techniques is to restore normal muscular function and a normal pattern of defecation. EMG biofeedback for the pelvic floor is done using a vaginal or anal electrode.

If biofeedback is done together with a bowel retraining programme, the outcome can be very successful to help the patient with inability to control bowel movements, incomplete emptying, or chronic constipation. Bowel retraining teaches new skills or strategies to develop a routine and predictable schedule for evacuation.

Neuromuscular electrical stimulation (NMES) is used to stimulate nerves and muscles to achieve a therapeutic response where the patient is unable to generate a sufficient contraction of the muscles. It is recommended that NMES should be combined with biofeedback and pelvic floor muscle exercise for optimal muscle strengthening.\textsuperscript{19}

**Lifestyle advice**

It is essential to help the patient understand what lifestyle changes can prevent recurrence or further damage. This includes advice on all activities or exercises that might increase intra-abdominal pressure:

- Reducing exacerbating activities (e.g. lifting, chronic coughing, straining on the toilet to pass stool);
- Avoid certain activities (e.g. squatting for a prolonged periods or lifting heavy objects repeatedly);
- Keep body weight within healthy limits to lessen the strain on the pelvic floor;
- Tighten pelvic floor muscles before lifting heavy objects, changing positions, coughing or sneezing;
- Seek early treatment for chronic coughs and quit smoking preferably;
- Vaginal estrogen creams can assist patients with urogenital atrophy;
- Understanding the impact of various exercises on the pelvic floor and prolapse especially for the patient wanting to return to sporting activities. Common exercises to avoid if you cannot control intra-abdominal pressure well are many strong abdominal exercises (e.g. sit ups, double leg raises, push ups, planks position, exercises against weights). Once patients have been taught proper stabilisation, they might be able to return to sport without implications for their recovery;

**Correct defecation dynamics**

Evacuation difficulties are one of the symptoms experienced by patients with POP and this might be the result of a mechanical cause for obstruction, for example, a rectocele or rectal prolapse but could also be due a non-relaxing puborectalis muscle or dyssynergic defaecation.\textsuperscript{19} Treating defecatory disorders and regulating bowel function to ensure that the patient doesn’t strain to pass a bowel motion is extremely important to reduce the pressure in the pelvic region.

Ensuring correct stool type (type 4 on the Bristol stool scale) by eating a diet rich in fibre, drinking enough fluid per day and including cardiovascular exercise into your daily routine is a simple measure that everybody can introduce.

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Adapted from Cabot Health, Bristol Stool Chart (http://cdn.intechopen.com/pdfs-wm/46082.pdf) (CC BY-SA 3.0 (http://creativecommons.org/licenses/by-sa/3.0)), via Wikimedia Commons

Teaching effective defecation dynamics is another simple measure, but essential to ensure proper function. Patients must understand how to pass a bowel motion without straining and how to relax the pelvic floor effectively while sitting on the toilet.

During normal defecation, the anal sphincters and the puborectalis muscle should relax to allow the
anorectal angle to widen and the perineum to descend. Simultaneously, the voluntary effort of bearing down increases the intra-abdominal pressure, together with the contraction of the rectum and puborectalis and this allows proper emptying to take place.\(^{18}\) (This imitates a squatting position)

In other words: you shouldn’t forcefully push, strain, or hold your breath, but should rather focus on complete relaxation of the pelvic floor (almost as if you visualize your anus widening) while gently pushing with your breath and allowing the stool to empty completely.

**Conclusion**

As part of the nonoperative management of POP physiotherapy can be considered as a safe and effective treatment intervention.

**References**


Bisphosphonates and hip fractures

Hip fractures are common in the elderly and carry high morbidity and mortality rates. There are predicted to be more than a million fractures each year worldwide with the numbers increasing as populations age. There are currently three approaches to the devastation caused by these injuries:

- better fracture management by a holistic package of care
- prevention by lifestyle changes
- prevention by drug treatment of osteoporosis

Better management of fractures

Evidence is accumulating that comprehensive care is better than conventional orthopaedic care in short and long-term outcomes following hip fractures. Bringing in full geriatric support to patients from admission to discharge from hospital has been shown to be beneficial (compared with routine care) in terms of recovery to prefracture activities (Prentmo et al Lancet 2015; 385:1623-33). The term orthogeriatric management has been coined to describe this special type of care.

Falls are the most common adverse events to occur in hospitals so better education of staff and in turn, patients, can lead to fewer incidents and positive steps towards recovery (Hill et al Lancet 2015;385:2592-9).

Prevention by life-style changes

Most hip fractures occur in people older than 75 years, many of whom are frail or have co-morbidities. In these people, physical activity has been shown to reduce fractures in a dose-response relation and exercise is good for morale, balance and is associated with improved quality of life and longevity (Feskanich et al JAMA 2002;288:2300-6).

Women with a history of falls can reduce their risk of injury should they fall again by being physically active. In a trial of women in their 70s, those who underwent an exercise-training programme halved their rate of injurious falls and improved their strength and balance compared to those receiving usual care. The authors note that the falls were associated with less morbidity.

The advice to stop smoking, exercise and eat well has benefits for the whole body, is easily implemented and is cost effective (Uusi-Rasi et al JAMA Int Med 2015;175:703-11).

Prevention by osteoporosis diagnosis and treatment

The current approach to hip fracture prevention in older women is by lifestyle modification plus medication with antiresorptive medication. The drug rationale is based on the assumptions that:

- bone fragility predicts hip fractures
- bone fragility can be assessed by measuring bone mineral density
- drug treatment of osteoporosis prevents fractures

However, does bone fragility really predict fractures? This may be a misconception as old people fall often, especially the very old with physical instability but it is the trauma of the fall that causes the fracture of their fragile bones. Drugs cannot change their hips into “fracture resistant structures”. It is the propensity to fall, not bone fragility that predicts fractures.

Between the ages of 55 years and 85 years, a woman’s chances of a hip fracture rise 44 fold. This risk is a function of age and bone fragility but the effect of age is ten times greater than bone strength. Impaired balance is more accurate than bone mineral density (BMD) in predicting fractures.

Serious questions are being asked about the relationship between taking bisphosphonates and a reduced risk of hip fractures. Drug treatment improves bone mineral density when compared with placebo, but does it reduce fracture likelihood in those most at risk?

Bisphosphonate trials that demonstrate increased BMD are in relatively young women for relatively short periods. This raises questions about when to start treatment and how long to continue and even if it reduces hip fracture rates at all in the very old.

There are controlled trials showing a reduction of hip fracture risk after three years of bisphosphonates but the decrease is small in absolute terms – less than 1%. The problem is the duration of the trials and when they are continued for longer than three years, bisphosphonates are no better than placebo in preventing fractures.

There are some trials in women over 75 years but these show no reduction in fracture risk. The latest research
examines the situation in the most vulnerable set of women – those over 65 years old and living in nursing homes (Greenspan et al JAMA Int Med 2015;175:913-21).

In this randomised trial of zolendronic acid, those receiving the drug did have an increased BMD both at one year and at two years but fracture and death rates were not affected. BMD is, at best, a surrogate measure of fracture risk in women over 75 years and long-term bisphosphonate treatment for the prevention of hip fractures is not an evidence-based strategy.

There are potential harms to bisphosphonates such as gastro-intestinal problems, atypical femoral fractures and osteonecrosis of the jaw. The amount of money spent on bisphosphonates has risen from US$ 0.3 billion to US$ 11 billion in the last 20 years so it is not surprising that BMD measurements and bisphosphonates are being promoted by industry. Other antiresorptive drugs also have side-effects and all have costs.

There are harms in being labeled “at risk” by BMD measurements with studies showing women who are told that they have “fragile bones” tend not to exercise for fear of falling and therefore compound their fracture likelihood. There are harms in being treated with drugs of no proven benefit that are not cost effective and have known side-effects, so careful judgment is required. The approach of hip fracture risk reduction through dual energy X-ray absorptiometry and decisions to treat with drugs based on BMD are, according to Järvinen et al (BMJ 2015;350:h2088) “an intellectual fallacy we will live to regret”.

Osteoporosis, calcium & vitamin D

Large numbers of older people take vitamin D and calcium in the belief that these supplements are necessary to prevent osteoporosis. They are also led to believe that preventing osteoporosis will protect them from fractures. Campaigns supporting these views are promoted by drug companies, advocacy groups and academics who stand to gain by selling, advising or researching this “deficiency/correction” policy as well as laboratories and marketers of the kits to measure blood levels (Greg & Bolland BMJ 2015;351:h3170).

However, osteoporosis is not caused by a deficiency of vitamin D or calcium but by an imbalance of osteoclast and osteoblast activity brought about by metabolic malfunction or the ageing process and a lack of exercise. Recent placebo controlled trials show no evidence in favour of vitamin D and/or calcium in preventing fractures by preventing osteoporosis by supplementation. On the contrary, excess calcium intake in the form of tablets or dairy products is associated with cardiovascular disease, or even raised fracture risks.

There have been at least ten random controlled trials and meta-analyses in the last decade itemising adverse outcomes including gastro-intestinal symptoms (both mild and requiring hospitalisation) as well as raised risks of strokes and myocardial infarction from supplementation with calcium or vitamin D.

These supplements are not harmless and money spent on them is money wasted.

So why do half of all older Americans and vast numbers of others take these supplements?

- because of advertising by drug companies claiming that calcium has “value in maintaining bone health”. With global sales of calcium alone worth at least US$ 6 billion annually it is easy to see why advertisements across all the media continue to appear.
- advocacy groups such as the US National Osteoporosis Foundation or the International Osteoporosis Foundation in Europe press for consumers to buy supplements because they are funded by the manufacturers whose names are quoted in the BMJ. They recall out-dated research findings in favour of supplementation and fail to note more recent data showing no benefit or demonstrating adverse events
- academics whose careers are advanced by drug company research have vested interests in keeping the myths alive. Anyone publishing in the field should declare their conflicts of interests.

Recent revelations that bisphosphonates do not prevent fractures (Järvinen et al BMJ 2015;350:h2088) plus evidence that supplementation is, on balance, harmful should prompt the medical profession to reflect on who is worthy of their support when they order tests or advise treatments.

Last year in the US, physicians were paid $6.5 billion directly or to their hospitals in over 11 million transactions (McCarthy BMJ 2015;351:h3697). These doctors would not be human if these vast sums did not persuade them to look kindly upon their benefactors. Do we collude with drug companies if we recommend supplements? The only losers when supplements are prescribed are patients.

Readers are invited to comment on this much-debated subject to be published in the next issue of Menopause Focus.
Confirmed International Faculty and topics:

Prof Pauline Maki (USA)
- The ageing female brain; a roadmap to success
- Menopause; stress and anxiety

Dr. Pauline M. Maki is Professor of Psychiatry and Psychology at the University of Illinois at Chicago. Dr. Maki's research over the last 15 years has focused on women's mental and cognitive health. Dr. Maki received her PhD in experimental psychology from the University of Minnesota in 1994. Dr. Maki is Immediate Past President of the North American Menopause Society (NAMS), a member of the NAMS Board of Trustees, the Chair of the NAMS Research Affairs Committee, and the Director of the NAMS Mentorship Program. She has numerous publications on hormones and cognitive function, won a number of NIH awards for her research and service, serves on executive committees for several women's health advisory boards, and is a frequent international and national speaker on women's cognitive health.

Dr Nick Panay (UK)
- Menopause, natural selection or modern disease?
- Premature Ovarian Insufficiency (POI) – an International Registry
- Compounded Bioidentical Hormones and the way forward

Dr Nick Panay is a consultant gynaecologist and subspecialist in Reproductive Medicine and Surgery at Queen Charlotte’s & Chelsea Hospital and Chelsea & Westminster Hospital in London as well as Honorary Senior Lecturer at the Imperial College in London. He has a special interest in Reproductive Medicine and Surgery and Menopause and Menstrual Disorders. As director of the West London Menopause and PMS Centre at Queen Charlotte’s & Chelsea & Westminster Hospitals, he heads a busy clinical research team which publicises widely, presents at scientific meetings and trains health professionals at all levels. Much of his teams research has focused on improving the understanding and management of premature menopause, PMS, new HRT preparations and complementary therapies. He is currently the Editor-in-chief of Climacteric (The Journal of the International Menopause Society) and is on the editorial boards of the Journal of Obstetrics and Gynaecology and Journal of Family Planning and Reproductive Healthcare.

Dr Maria Shapiro (Canada)
- GSM/VVA: Underestimated, Under diagnosed and Under treated
- Approach to the Ongoing Care of the Breast Cancer Survivor

Dr. Shapiro completed medical school at McGill University and trained at the University of Toronto for her Masters of Health Science in Community Health and Epidemiology. She trained in Family Medicine and is certified by the Canadian College of Family Practice. She concluded her specialty training in Preventive Medicine and Public Health, receiving her Fellowship from the Royal College of Physicians and Surgeons of Canada. She holds a Fellowship in Family Medicine and is a North American Menopause Society credentialed menopause specialist and NAMS President Elect.

Dr Suresh Kumarasamy (Malaysia)
- Care of the menopausal endometrium
- Menopause Hormone Therapy (MHT) and breast cancer

Dr Suresh Kumarasamy obtained his postgraduate qualifications in Obstetrics and Gynaecology from both the University of Malaya and the Royal College of Obstetricians & Gynaecologists, London. He obtained further sub-speciality training in Gynaecological Oncology at the Northern Regional Gynaecological Oncology Centre, United Kingdom as well as the Department of Cancer Medicine, University of Sydney, Australia. He is a Fellow of the Royal College of Obstetricians and Gynaecologists, London as well as a Fellow ad eundem of the Royal College of Physicians of Ireland. He has an academic appointment as Adjunct Clinical Professor at Penang Medical College. Dr Suresh lectures frequently at national and international meetings in his areas of expertise. He is a council member of the Asian Society of Gynaecological Oncology, Chair of the Gynaecological Oncology Sub-committee and Past President of the Obstetrical & Gynaecological Society of Malaysia and Editorial Advisory Board member of the Journal of Gynaecological Oncology. He is also a member of the Malaysian Menopause Society. He has served on a number of Ministry of Health Malaysia committees and industry global, regional and national advisory boards.
The South African Menopause Society Council gets elected every 2 years at the South African Menopause Society Conference. This year’s conference in November is a little bit earlier than 2 years, but nevertheless, it is appropriate to use this time to elect a new Council.

As we are uncertain as to how many SAMS members will be present at the conference in Cape Town, we plan to arrange an electronic election, prior to the conference. This means we will be calling for nominations for election to the new council. These nominations need to come from members of SAMS and the nominated person should be a member of the South African Menopause Society. Changing from previously, we would like a very short CV for each nominee.

We shall also be returning to the constitution of SAMS and go back to the recommended SAMS Council membership, which should be the President, the immediate ex President, Secretary and Treasurer, plus 9 members. This means the new council will have a maximum of 13 members and therefore easier to manage and financially possible to have regular meetings.

We shall be circulating members of SAMS, asking for nominations and then Alison Shaw will arrange an electronic voting process.

We are hoping that the SAMS council will continue to run SAMS as well as it has in the past and would suggest that anybody putting their name forward for membership of the SAMS council should be willing to write one article for Menopause Focus every year as well as contribute to News by Fax and be prepared to occasionally speak at a continuing medical education meeting.

SAMS looks forward to seeing you at the conference in Cape Town in November and we are sure that the new council will continue to contribute to the dissemination of relevant information to our colleagues.

Please contact Alison at alison@royalh.co.za to join SAMS to have a say in the future.

Peter Roos
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[Image of the product]

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![Image showing the comparison]

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¹ Hormone Therapy
VTE: Venous thromboembolism

²,³,⁴,⁵,⁶,⁷,⁸,⁹ Data on file. For full prescribing information refer to the package insert approved by the medicines regulatory authority. 18/05/2018

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References:

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