

## POGP CONFERENCE 2015

# Vaginal pessaries: indications, complications and troubleshooting

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### Abstract

For many years, women have used vaginal pessaries to manage urogenital prolapse, and more recently, these devices have also been used to control urinary incontinence. The aim of this article is to outline the indications for the use of pessaries, and address patient suitability for this form of treatment. Common pessary-related complaints that women may report are discussed, and suitable investigations and interventions are suggested. A brief review of the serious complications that can arise if pessaries are not managed appropriately is also included.

*Keywords:* complications, indications, patient suitability, troubleshooting, vaginal pessaries.

### Introduction

Pelvic organ prolapse (POP) is a very common condition, particularly among older women. It is estimated that 50% of women who have children will experience some form of POP in later life (Smith *et al.* 2010), although the true prevalence is not known because many women do not seek the help of a healthcare professional.

All women have an 11.7% risk of having at least one operation for POP during their lifetime (Olsen *et al.* 1997). Prolapse is rarely caused by one single event, but rather, it is the result of the cumulative effects of lifestyle, work, and previous injury or trauma to the pelvic floor.

There are a number of risk factors for POP; for example:

- pregnancy and childbirth;
- ageing and the menopause;
- lifestyle factors, including constipation, smoking and being overweight;
- exercise, such as continuous heavy lifting and strenuous exercise in the gym;
- chronic (i.e. long-standing) illnesses that cause constant stress and strain on the pelvic floor;
- previous pelvic surgery; and
- a genetic predisposition, such as connective tissue weakness (i.e. hypermobility), where the

support systems of an individual's muscles and tissues are weaker than normal (signs of this include red hair, fair skin, stretch marks, and genetic collagen deficiency disorders such as Marfan syndrome or Ehlers–Danlos syndrome).

There are three main treatment options for POP. The first-line approach should always be pelvic floor physiotherapy. Although this will help to strengthen the pelvic floor muscles, which will better support the prolapse, relieve some symptoms and stop the condition progressing, it does not generally resolve the prolapse. The second option is a pessary, and the third and most invasive is surgery.

### Indications for use

Pessaries are generally recommended as a conservative form of treatment for POP in women who:

- choose to try such a device;
- are waiting for surgery or deferring surgery, and want some temporary relief from their symptoms;
- are pregnant, postpartum or want to have more children in the future; and/or
- are unfit or choose not to undergo surgery.

For some women, a pessary may be seen as a short-term management strategy. However, it has been shown that, if fitted well, more than 50% of patients will continue to use a pessary for more

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than a year (Sulak *et al.* 1994). Fernando *et al.* (2006) reported that, independent of the type of pessary, rates of improvement of symptoms have been reported to be as high as 83% for women with POP, 58% for those with urge urinary incontinence and 23% for those with stress urinary incontinence. Pessaries are available in a variety of different sizes and styles. Some work by providing support, while others are space-filling devices. There is a growing trend for women to self-manage their pessaries at home by removing, cleaning and reinserting the pessary. This is essential for women using cube and Inflatoball pessaries (Milex Products Inc., Chicago, IL, USA), and is also often performed by those with ring pessaries. However, not all patients choose to self-manage, while some are unsuitable for this approach. Furthermore, certain pessaries (e.g. Gellhorns) cannot be self-removed.

### Are pessaries suitable for all?

Unfortunately, pessaries are not suitable for everyone with POP, and up to 22% of women cannot be fitted correctly (Wu *et al.* 1997). This can be for a number of reasons, including the shape of the vagina or the degree of prolapse. If a woman has had previous vaginal surgery, there may be scarring or bands of tissue that prevent or cause significant discomfort on insertion of the pessary, and these problems can also cause cramping when the device is *in situ*. Furthermore, some women simply do not like the thought of having anything in their vaginas for a significant period of time.

There are also factors that the healthcare professional should consider prior to offering to

fit individuals with a pessary. The most serious complications associated with these devices are linked to the neglect of routine pessary care in non-compliant patients. This may not be always take the form of direct non-compliance on the patient's part in cases of dementia, and other mental or physical health conditions that may limit an individual's ability to remember appointments or attend these unaided. If there is not an appropriate care plan in place or support to ensure that the plan is followed, then a pessary should not be considered.

### Complications

There are no set UK or international standards or guidelines on how often pessaries should be changed or inspected in order to prevent complications. A survey by Gorti *et al.* (2009) suggested that most clinicians opt for a 6-monthly review, but the reported range was 3–12 months. A Cochrane review reported that complications associated with pessaries are rare, and that there is no consensus on complication management (Bugge *et al.* 2013). The most frequently reported complication of pessary use is superficial vaginal mucosal erosion, which presents as a foul odour, purulent discharge, irregular blood-stained discharge and an increase in vaginal fluid (Abdulaziz *et al.* 2015). A literature review by Arias *et al.* (2008) listed all the serious complications that have been reported in association with neglected pessaries (see Table 1).

### Fitting pessaries

Patients should be informed that it is not uncommon to have to change the size or type of

**Table 1.** Serious complications (total  $n=23$ ) reported in association with neglected pessaries (Arias *et al.* 2008)

Complication	Type of pessary	Number of cases
<i>Urological</i>		
Urosepsis	Gellhorn	1
	Shelf	1
Ureteric obstruction	Ring	1
<i>Urinary</i>		
Vesicovaginal fistula caused by neglected pessary	Shelf	2
	Gellhorn	4
Vesicovaginal fistula caused by severe atrophy	Ring	1
	Gehrung	1
<i>Bowel</i>		
Vaginal vault perforation	Ring	1
Rectovaginal fistula	Shelf	4
Caecal rupture caused by dislocated pessary with fatal outcome	Ring	1
<i>Embedded pessaries</i>		
Incarcerated embedded pessary requiring major surgical intervention	Ring*	6

\*All used for > 10 years.

**Table 2.** Troubleshooting problems with pessaries: (HRT) hormone replacement therapy

Problem	Solutions
Pessary slips down	Advise patient to insert a clean finger in the vagina and push the pessary back up Pull the pessary out Try a larger size of pessary Manage constipation Consider an alternative shape of pessary
Incomplete bladder emptying, reduced urinary flow and/or voiding difficulties	Assess post-void residual urine volume and/or flow rate Try a smaller size of pessary Manage constipation Consider an alternative shape of pessary
New-onset urinary incontinence	Assess post-void residual urine volume and use a dipstick to rule out a urinary tract infection Pelvic floor muscle training Consider an alternative pessary (e.g. a ring with a knob)
Pessary falls out when bowels open	Manage constipation Defecatory techniques Try a smaller or larger size of pessary Consider an alternative shape of pessary
Abnormal vaginal discharge	May be caused by a normal foreign-body effect High or low vaginal swab Culture: antibiotic (clindamycin) or antifungal (itraconazole) Balance-Activ or Relactagel Oestrogen cream or ring, or non-oestrogen moisturizer More-frequent removal and cleaning of pessary Hygiene!
Per vaginal bleeding	Perform a speculum examination to inspect the vagina for ulceration Book patient for a transvaginal scan to assess endometrial thickness
Vaginal wall ulceration	Topical HRT Do not reinsert pessary Reassess after 1–4 weeks Reinsert pessary, if appropriate
Vaginal atrophy	Topical HRT
Unable to remove the pessary	Feel all the way around the pessary to examine for overgrown tissue Try to spin the pessary within the vagina Local anaesthetic gel to make the patient more comfortable Know where your nearest bone cutters are! Referral to local gynaecologist for removal in theatre Do not reinsert the pessary straight away

pessary when they are first being fitted with one. It is often helpful to have them stand, sit, walk, squat and empty their bladders (to check post-void residual urine volume, if indicated). Healthcare professionals should always assess comfort, relief of symptoms and whether the patient has noticed any urinary leakage. The instructions that women are given are essential to helping them to self-manage their pessaries, and to know when to seek medical advice. Women should be advised to report any of the concerns listed below, and they should be provided with contact details so that they can do so.

Symptoms to be reported include:

- bleeding or discomfort/pain;
- difficulty voiding;
- any change in the colour or consistency of vaginal discharge;

- any increase in the amount of vaginal discharge;
- any foul odour associated with vaginal discharge; and
- vaginal itching.

### Troubleshooting

Sizing a pessary is often a case of trial and error. It is vital to ensure that the best-fitting device is chosen so as to ensure that complications are minimized. Long-term management plans will vary between individuals and their behaviours. As noted above, there are no guidelines on the management of pessaries and the associated complications, and there is only a limited evidence base. The troubleshooting guide in Table 2 is based on previous experience,

case-based discussion with other experts and tips picked up from other healthcare professionals when running specialist pessary study days. This can be used to guide your practice, but it should also be noted that you should develop a formal patient pathway that has been reviewed by a local governance committee.

## Conclusions

For many women, a pessary is an ideal option to manage POP. However, it is essential to remember that even this conservative form of intervention can have adverse effects on women. The keys to ensuring that pessaries do not cause women long-term harm are regular assessment and evaluation, and educating patients to encourage them to self-report any concerns.

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