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### Key points

- Prolapse occurs when pelvic organs protrude into the vagina due to weakness in the tissues that normally support them
- Conservative measures such as vaginal ring pessaries can improve symptoms in most women
- Clinical examination is essential as choice of vaginal pessary largely depends on the type and severity of the prolapse
- Vaginal pessaries should be fitted by experienced clinicians to ensure a correct and comfortable fit
- Women must be followed up regularly to replace the pessary and avoid rare but serious complications

## How To



# FIT A VAGINAL PESSARY FOR PELVIC ORGAN PROLAPSE

Pelvic organ prolapse is common, affecting about one third of women during their lives. Most women are asymptomatic, but prolapse can be serious enough to need referral for surgery. The good news is that vaginal ring pessaries can improve prolapse symptoms and restore quality of life for most women seeking help from their GP or practice nurse.

Pelvic organs such as the uterus, bladder and bowel can protrude into the vagina due to weakness in the tissues that normally support them. Some degree of prolapse is seen in up to 50% of parous women attending hospital clinics. The condition has a lifetime prevalence of 30% with an 11% risk for surgery.<sup>1</sup>

Pelvic organ prolapse is multifactorial. Risk factors include pregnancy, childbirth, congenital or acquired connective tissue abnormalities, denervation or weakness of the pelvic floor, ageing, menopause, and factors associated with chronically raised intra-abdominal pressure, such as constipation and chronic cough.<sup>2,3</sup>

Most vaginal pessaries are shaped devices made of plastic, which are carefully inserted into the vagina. The benefits of vaginal pessaries include their low costs and low complication rates. Generally, conservative measures such as pessaries and pelvic floor muscle training are considered for women with a mild degree of prolapse, whose family is incomplete, or who wish to avoid or defer, or are unfit for surgery.



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**“Vaginal pessaries are a quick, simple, non-surgical and effective option that can help to alleviate symptoms and improve quality of life”**

# How To



**Table 1: Classification of pelvic organ prolapse**

Anterior compartment	Bladder (cystocoele), urethra (urethrocoele)
Middle compartment	Uterus or vaginal vault
Posterior compartment	Rectum (rectocoele), small bowel or omentum (enterocoele)

**Table 2: International Continence Society POP-Q staging for pelvic organ prolapse**

Stage 0	No descent of pelvic organs during straining
Stage 1	Leading surface of the prolapse does not descend below 1 cm above hymenal ring
Stage 2	Leading edge of the prolapse extends from 1 cm above to 1 cm below the hymenal ring
Stage 3	Leading edge of prolapse is > 1 cm below the hymenal ring
Stage 4	Complete procidentia (eversion of the vagina)

Based on: Persu C, et al. *J Med Life* 2011;4:75-81

## DIAGNOSIS

Depending on the type and severity of the prolapse, women report a variety of pelvic floor symptoms.

These include:

- Pelvic heaviness, a dragging sensation in the vagina, a bulge/lump or protrusion from the vagina, and backache
- Bladder symptoms include frequent urination, difficulty emptying the bladder, urgency or frequent bladder infections
- Bowel symptoms can present as constipation or difficulty emptying the bowel, where the woman may find that she needs to place her fingers on the back wall of the vagina to help evacuate her bowel
- Symptoms of sexual dysfunction (*i.e.* dyspareunia) are also frequent

Clinical examination is essential, using the Valsalva manoeuvre and a speculum to evaluate the patient's prolapse. The first step is to classify her prolapse according to its anatomical position, with the pelvis divided into anterior, middle and posterior compartments (Table 1). Then grade the degree of prolapse. The International Continence Society Pelvic Organ Prolapse Quantification System (POP-Q) is recommended (Table 2).

## CHOOSING A PESSARY

The appropriate management of pelvic organ prolapse depends on several factors. These include the severity of symptoms, the patient's age, general

health, co-morbidity, her preferences, and whether her family is complete. When opting for conservative measures such as pelvic floor muscle training and pessaries, the aims are to prevent worsening of the prolapse, reduce the frequency and severity of symptoms, and to either avert or delay the need for surgery.

There is minimal evidence guiding choice of pessary.<sup>4</sup> Ring (Figure 1) and shelf pessaries have traditionally been most commonly used in the UK, but Gellhorn and silicone-ring pessaries are becoming increasingly popular. In general, selection largely depends on the type and severity of the prolapse. Figures 2 and 3 show pessaries commonly used for respectively Stages 1-2 and Stages 3-4 pelvic organ prolapse.

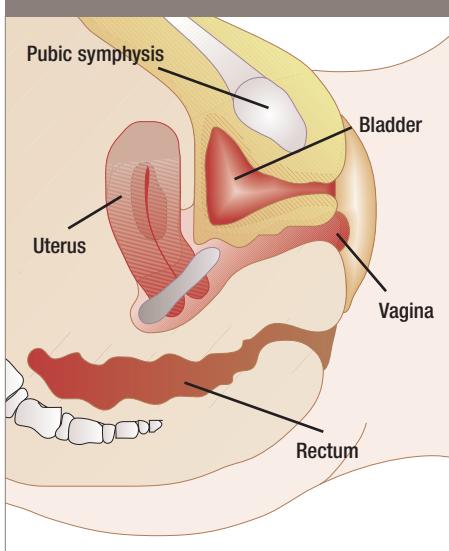
A ring pessary is often more effective in women who have not undergone hysterectomy, but the pessary may be expelled if the vaginal outlet is enlarged. In this situation, a shelf pessary may be helpful. The Gellhorn is useful if the patient has an intact perineal body. The doughnut or cube may be used in patients with complete procidentia or poor perineal body support.

## FITTING AND FOLLOW-UP

As the pessary is a foreign object, women must be willing to attend regularly for replacement of the device and follow-up. They should also be aware that, while adverse effects are unusual, there are the small risks of vaginal ulceration and embedment of the pessary. Most currently available pessaries are made of inert polystyrene plastics or silicone, so should not affect women with latex allergy.

An experienced clinician should fit the pessary initially. Finding the perfect size can involve some trial and error. The aim is to find a pessary that is comfortable and not felt by the patient, and is not

**Figure 1: Ring pessary in position**



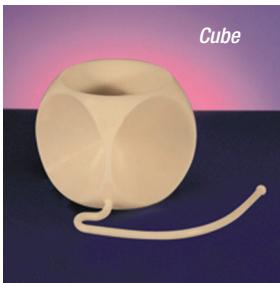
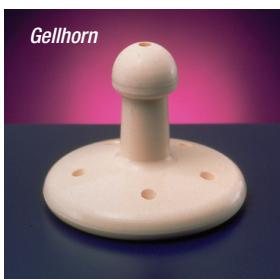
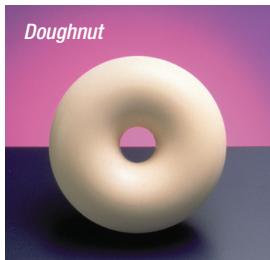
**Figure 2: Pessaries for Stage 1-2 prolapse**



# How To



**Figure 3: Pessaries for Stage 3-4 prolapse**



so loose that it is expelled, but not so tight that there is a risk of vaginal excoriation or ulceration.

Pessary size can be determined by measuring the distance between the posterior fornix and the pubic notch using two fingers. Once the fingers are withdrawn, a 'best fit' ring pessary can be selected by approximating its diameter.

Before insertion the ring pessary is lubricated at the entering end using either oestrogen cream or lubricating gel. It is then folded slightly in half and inserted so that one end of the ring is behind the cervix and the opposite end is behind the pubic notch.

There is no consensus on frequency of changing pessaries. However, most healthcare professionals advise replacement every four to six months. When changing pessaries, it is important to carefully assess vaginal skin with a Cusco speculum, looking in particular for signs of erosion, ulcers or skin bridging around the pessary.

Patient education, a correctly sized and fitted pessary, as well as careful examination of vaginal skin can help to reduce and/or detect complications. Increased vaginal discharge and odour are the most common complaints in patients with pessaries. These problems are usually resolved by regularly removing and changing the pessary, using a correctly sized and fitted pessary, and local oestrogen therapy.

Poorly fitted and neglected pessaries can result in vaginal ulceration and formation of granulation tissue, leading to postmenopausal bleeding. Embedded or incarcerated pessaries can prove difficult to remove, and may sometimes require surgery

under general anaesthetic. Although rare, vesico-vaginal and recto-vaginal fistulas have also been reported.<sup>5</sup>

## OTHER USES

Women with stress urinary incontinence may be suitable for pessaries designed to support the urethrovesical junction and possibly increase urethral closure pressure. The aim is to provide similar support to the urethra as with surgical procedures such as tension-free vaginal tape. There is some evidence that continence pessaries improve urinary symptoms in up to 50% of women.<sup>6,7</sup>

Pessaries that provide support to the vagina/suburethral area are also available for use 'as required' by women who experience prolapse or stress incontinence symptoms only during physical exercise. The woman herself inserts the pessary and removes it following completion of exercise. In particular, Smith, cube or Hodge pessaries may prove beneficial for women using pessaries under these conditions.<sup>8</sup>

## CONCLUSION

Many women suffer the consequences of a pelvic organ prolapse in silence due to the very personal nature of the problem. Vaginal pessaries are a quick, simple, non-surgical and effective option that can help to alleviate symptoms and improve quality of life for many women with prolapse.

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## more information

- Information on pelvic organ prolapse from the Bladder and Bowel Foundation: [www.bladderandbowelfoundation.org](http://www.bladderandbowelfoundation.org)
- Women's Health Concern factsheet, Prolapse: uterine and vaginal prolapse: [www.womens-health-concern.org](http://www.womens-health-concern.org)
- Information on prolapse of the uterus from NHS Choices: [www.nhs.uk](http://www.nhs.uk)

## Further reading

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