

Commonly used pessary types – a practical guide

Pessary selection and sizing is often more of an art than a science. However, there are several factors that may be considered when selecting a pessary. These include the shape of the vagina, the severity of the pelvic organ prolapse, whether the patient would like to self-manage her pessary and if she wishes to commence or maintain sexual activity.

This section will describe each of the pessaries commonly used in the UK, discussing fitting and removal techniques along with information on materials and sizes for each type. Many pessaries are available in a variety of materials, some which are flexible and others that are rigid. Although, it is considered that some women may need a more rigid pessary to support their prolapse, many consider that a flexible pessary is more comfortable, easier to remove and insert and therefore easier to self-manage. A silicone pessary being softer may be less likely to erode the vaginal walls.

Women can be sexually active with some types of pessary in situ or they may choose to remove the pessary prior to intercourse. This may be more challenging with certain types of pessary for example the Gellhorn, shelf and Donut pessary.

It is noted that there are regional/local variations in pessary preferences and these may be due to experience, knowledge, availability and cost. Not all pessary clinicians will use all types of pessary in their routine practice, but an understanding of what is available and why it may be used is essential in managing cases where more conventional pessary types have been unsuccessful.

Ring pessaries



Overview

Rings are the most used pessaries. They can be fitted for any type of pelvic organ prolapse but may be less successful if the perineum is unable to provide enough support such that the ring is poorly retained or if the upper vagina is narrowed by previous surgery e.g. hysterectomy. Sexual activity is possible with the pessary in place as the vaginal space is not filled by the device although either partner may find sexual intercourse uncomfortable and may wish to remove it before sex. Self-management most commonly involves a ring pessary.

Materials and sizes

PVC (vinyl) ring pessaries are latex free devices. The outer diameter can vary from 50–110 mm and are available in two materials; the flexible vinyl (PVC) pessary has a wall thickness of 12.5 mm and the rigid polythene pessary has a wall thickness of 7.5 mm. It is recommended by the group that the thicker (12.5 mm) ring pessary should be used in preference to the narrower more rigid (7.5 mm) pessary. These can be replaced as per the local policy or as indicated by the pessary condition.

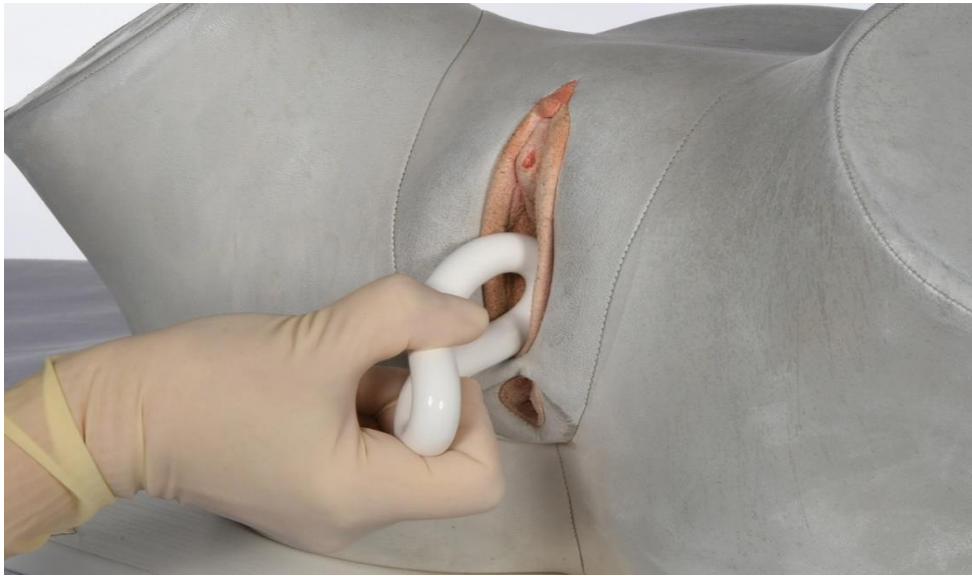
Silicone rings are also available; some of these contain a steel spring filling to help them keep their shape. These pessaries are more pliable than the PVC pessaries and as they can fold, are often easier to insert and remove so are useful for a woman who is self-managing. They are available in a variety of sizes from 44–127 mm outer diameter. Silicone pessaries are more expensive to buy but can be washed and re-inserted on many occasions. Different

manufacturers recommended a variety of timescales but they range from 20 washes/reviews up to 10 years if the pessary is intact and not visibly damaged. Please refer to the individual manufacturer's recommendations for specific advice. Most silicone pessaries are powdered with a food-grade powder that must be washed off with water prior to insertion. Pessaries that contain a metal spring/core may need to be removed prior to certain investigations e.g. MRI scans.

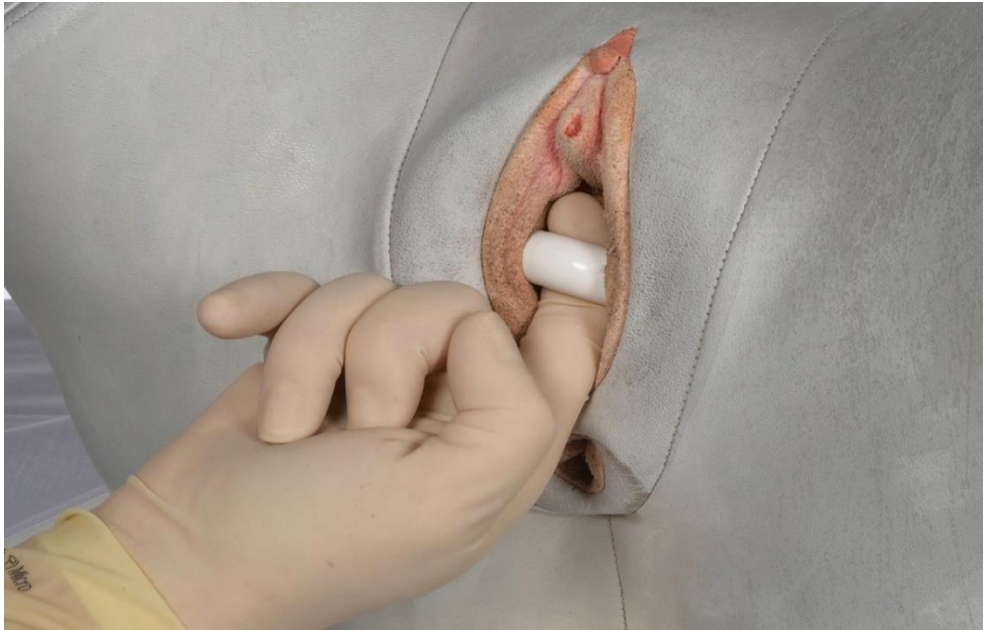
Fitting

In order to fit a ring pessary, it should be compressed to reduce its width or twisted into a figure of eight. It may be helpful to run it under warm water to make it more pliable. The compression can be maintained by making a "tube" with the other hand for it to be gently pushed through during insertion as shown in the illustrations below. The compressed ring is introduced into the vagina and once more than half of the compressed ring has been inserted, it can gradually be released as it is further inserted and will usually end up in the correct position without the need for much further adjustment. It may be pushed upwards with the index finger to locate the front edge behind the symphysis pubis. If a woman has a cervix, it should be ensured that the back edge of the pessary lies behind, and not in front, of the cervix. The correct position is with the posterior edge in the posterior vaginal fornix and the anterior edge behind the symphysis pubis. If the anterior edge sits directly under the symphysis pubis, the ring may be too large and may be uncomfortable or not retained. Once fitted a woman can be asked to cough and stand up to ensure the pessary remains in the correct position.

Ring pessary insertion



Ring pessary removal



Removal

To remove a ring pessary, an index finger should be hooked around the anterior leading edge of the pessary to bring it down to the introitus. Once it reaches the introitus, it should be compressed as much as possible and then be very gently eased out of the vagina.

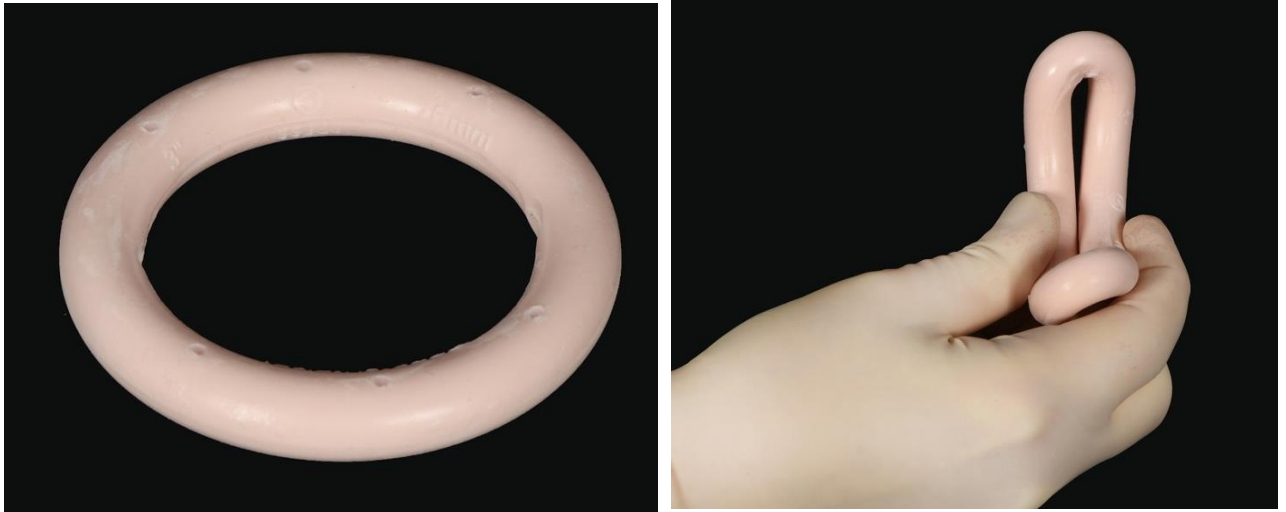
Frequency of change/check

Traditionally, a woman seeing a health care professional (HCP) for routine changes of a ring pessary would be seen approximately every six months. For a woman who is self-managing, a review may take place yearly.

Variations of ring pessaries

Silicone folding ring pessary – these are more pliable than vinyl pessaries and fold in the middle at the notches so are easier to insert and remove, especially in a woman with reduced manual dexterity. Insertion and removal techniques are similar to the vinyl ring but the pessary is folded rather than compressed or twisted. The pessary is inserted with the notches aligned to the front and back, then rotated once in place to position the notches to the sides to avoid the pessary folding and being expelled. It should be rotated back again before removing so that it folds correctly to aid removal.

Folding ring pessary



Ring with knob – is designed for a woman with both pelvic organ prolapse and stress urinary incontinence (SUI) and can also be useful when new symptoms of stress incontinence develop when her prolapse is reduced with an initial trial of a pessary without knob. The knob adds additional width to the pessary which may affect the sizing and provides support to the bladder neck to reduce SUI. It should be inserted like a standard ring but with the knob to one side and then rotated in the vagina so that the knob sits behind the symphysis pubis. It should be rotated back again before removal. For a woman without prolapse but just SUI, an incontinence pessary is available, which is the same design but with a thinner ring.

Ring pessary with knob

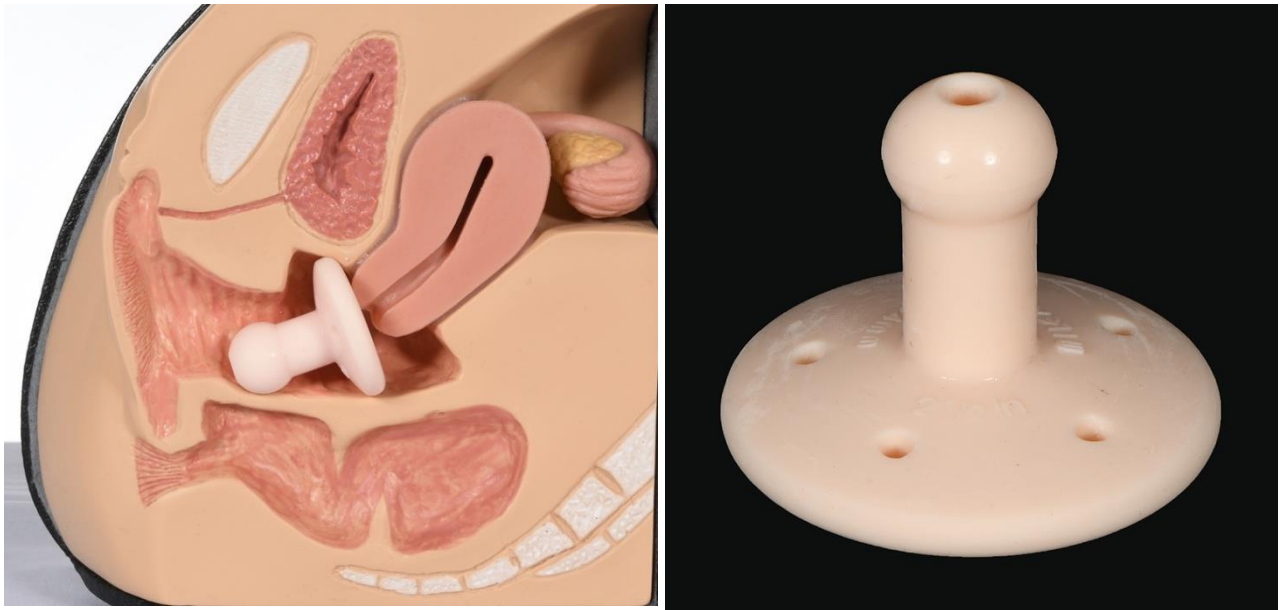


Silicone ring with support – for a woman who has a more significant degree of uterine prolapse, for example when the pessary is in place and she is aware of the prolapse protruding through the ring or feels that the pessary is not providing enough support, a ring with support may be considered. It provides a flexible supporting membrane with drainage ports that prevents the uterus falling through the centre of the ring.

Ring pessary with support



Gellhorn pessary



Overview

Gellhorn pessaries are a circular, flat plate with a stem in the centre which stabilizes the pessary in the vagina. It is often considered for a woman who has more advanced prolapse or who needs additional support. The cervix or vaginal vault rests behind the flat plate of the pessary and the stem should only be visible at the introitus when the woman performs a Valsalva manoeuvre (strains downwards). Although many women feel that sexual activity is not possible with a Gellhorn in, some women can maintain certain sexual activities. Self-management is a lot more difficult with this pessary but it is possible.

Materials and Sizes

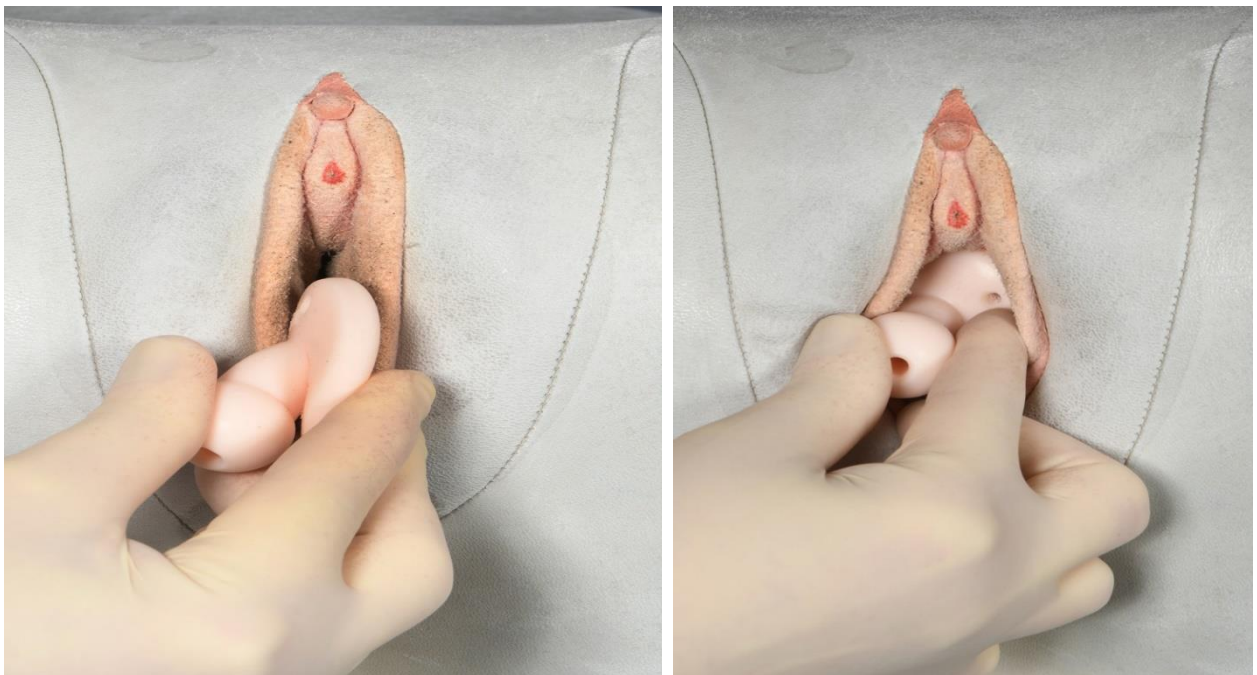
Most Gellhorn pessaries are made of a flexible silicone material, however rigid silicone and acrylic varieties are available. They are sized in two ways; the first in the same way as a ring pessary to determine the outer diameter size of the circular plate (available in 38–95 mm) and secondly the vaginal length must be considered to enable a choice between a standard-length stem or short stem. The pessary has drainage ports to allow the passage of fluids, although they do not readily allow drainage of menstrual flow.

Fitting

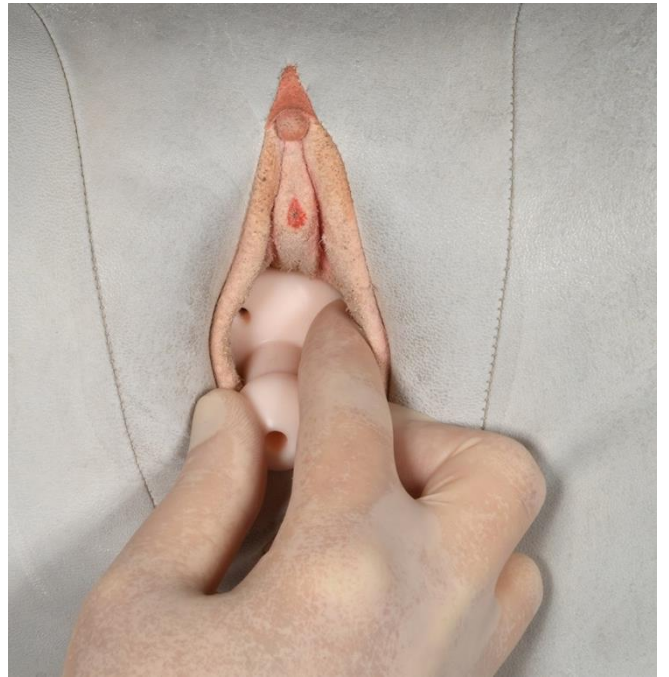
There are two options for Gellhorn pessary fitting depending on the estimated size of the Gellhorn and the size of the introitus:

1. Holding it with the stem flattened sideways to compress the pessary, the edge of the plate is introduced first; once half of the plate is inside the vagina, the pessary is then rotated into a horizontal position whilst pushing it upwards at the same time so that the edge is placed in the posterior fornix with the stem sitting in the centre of the vagina.
2. Folding the plate of the pessary behind the stem, the pessary is then introduced into the vagina and pushed towards the posterior fornix, with the stem sitting in the centre of the vagina.

Gellhorn pessary insertion technique 1 stem folded



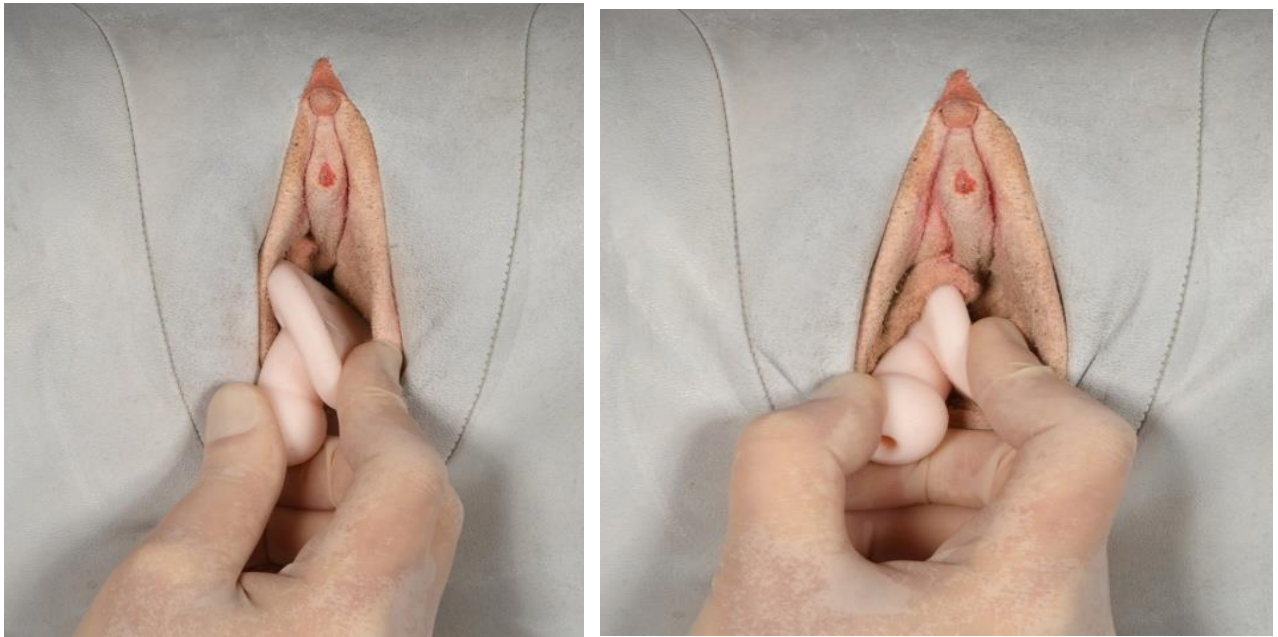
Gellhorn pessary insertion 2 plate folded



Gellhorn pessary in situ



Gellhorn pessary removal



Removal

A finger needs to be introduced to the side of the plate to move it and release the suction. Once the plate is mobile, the pessary should be folded by placing the middle finger around the stem. The index finger is then hooked round the edge of the plate folding it towards the stem whilst also bringing it down to the introitus. The tip of the stem needs to be outside the introitus before the plate can be gently eased out compressing the edges if possible, to reduce the diameter.

A Gellhorn pessary can be difficult to remove but the following may be tried:

- using a sponge holder on the stem to allow better grip and then easier access to slide your finger around the back to release the suction.
- a sponge holder can also be applied to the edge of the pessary to help bring it down.
- use of a speculum if the pessary is sitting high in the vagina can be helpful to find the stem to put the sponge holder onto to help remove it.
- water or a local anaesthetic gel can also be inserted through the stem of the pessary to help break the suction of the plate and facilitate removal without discomfort.
- asking the woman to lift her bottom slightly (bridging) or to roll onto her side can help release the suction and increase the space for easier removal

Frequency of change/check

Most commonly, reviews take place every 3–6 months.

Shelf pessary



Overview

Shelf pessaries have a kidney-shaped plate for support with a curved stem in the centre for stabilization in the vagina. The convex edge of the pessary sits in the posterior vaginal fornix and the concave edge faces toward the bladder. It is usually used for a woman with more advanced prolapse. Challenges with sexual activities and self-management are the same as for the Gellhorn pessary.

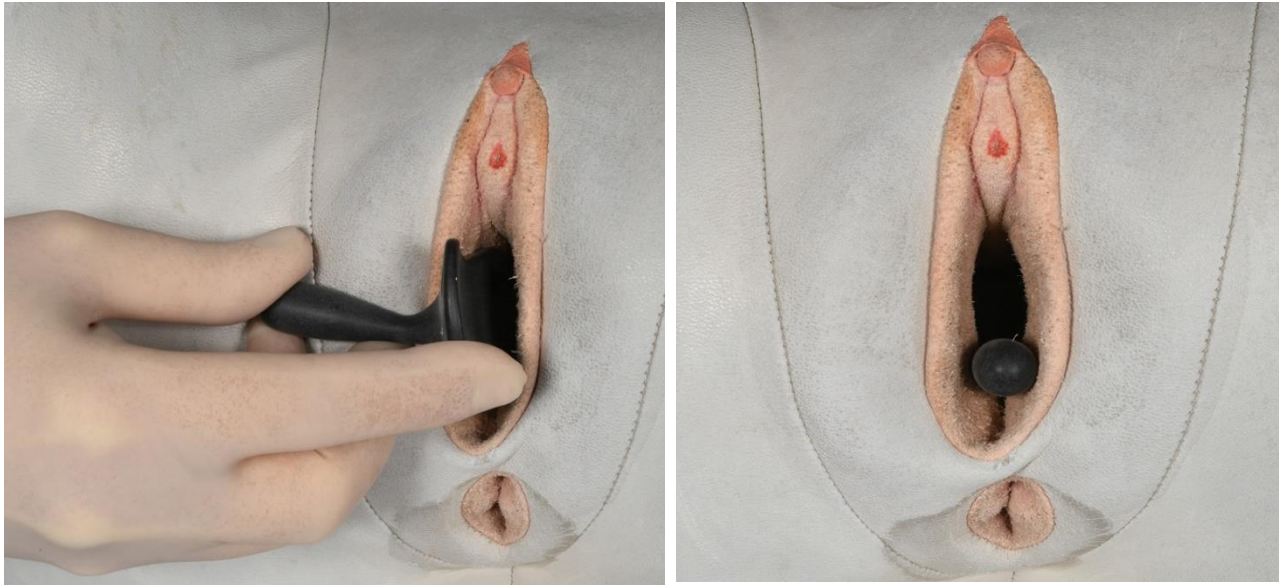
Materials and Sizes

A shelf pessary may be rigid and not compressible (made of an acetyl copolymer) or made of silicone and compressible which makes removal easier. They are available in a range of different sizes (51–102 mm for the rigid and 38–95 mm for silicone). The silicone pessaries are also available in a standard and short stem length. The pessary has drainage ports to allow passage of fluids, although they do not readily allow drainage of menstrual flow.

Fitting

It is fitted by holding it firmly with the stem pointing sideways so that the thin edge of the plate is introduced first. Once half of the plate is inside the vagina, the pessary is then rotated into a horizontal position whilst pushing it upwards at the same time so that the posterior round edge is placed in the posterior fornix. The stem should point forward.

Shelf pessary insertion



Shelf pessary removal



Removal

The index finger is hooked behind the edge of the plate to release the suction that builds up between the pessary and the vaginal walls allowing the pessary to be brought down so that the tip of the stem is outside the vagina. Once the stem is outside, the pessary may be rotated to place the plate in a vertical position and ease it out of the introitus. Either the anterior or the posterior edge may be released first depending on which is easier.

Frequency of change/check

Most commonly, reviews take place every 3–6 months.

Shaatz pessary



Overview

The Shaatz pessary is similar to the Gellhorn pessary but without a stem. It is recommended for a woman with a low or shallow pubic notch who cannot retain a ring pessary. It is ideal for a woman who wishes to maintain sexual activity but requires more support. It is suitable for self-management.

Materials and Sizes

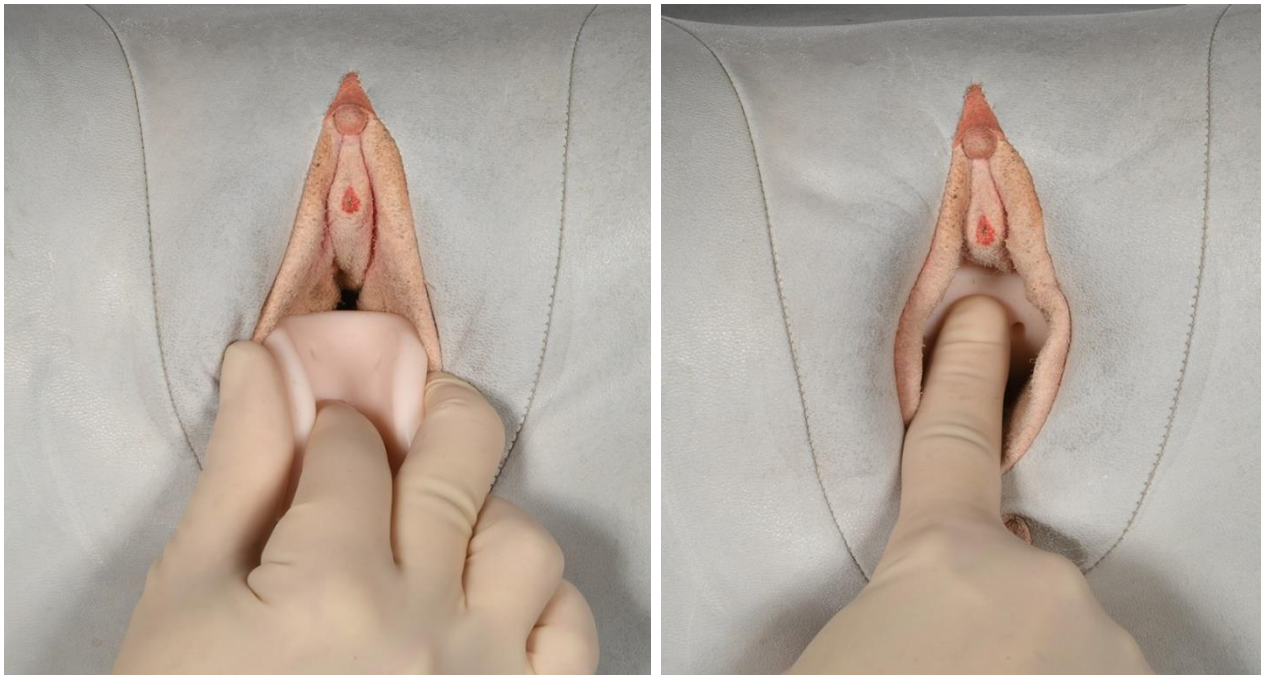
Shaatz pessaries are generally made of soft silicone and have drainage ports to allow the passage of fluids. Shaatz pessaries are also called folding Shaatz as they can fold in half making

insertion and removal easier. They are available in a range of sizes between 38–95 mm outer diameters.

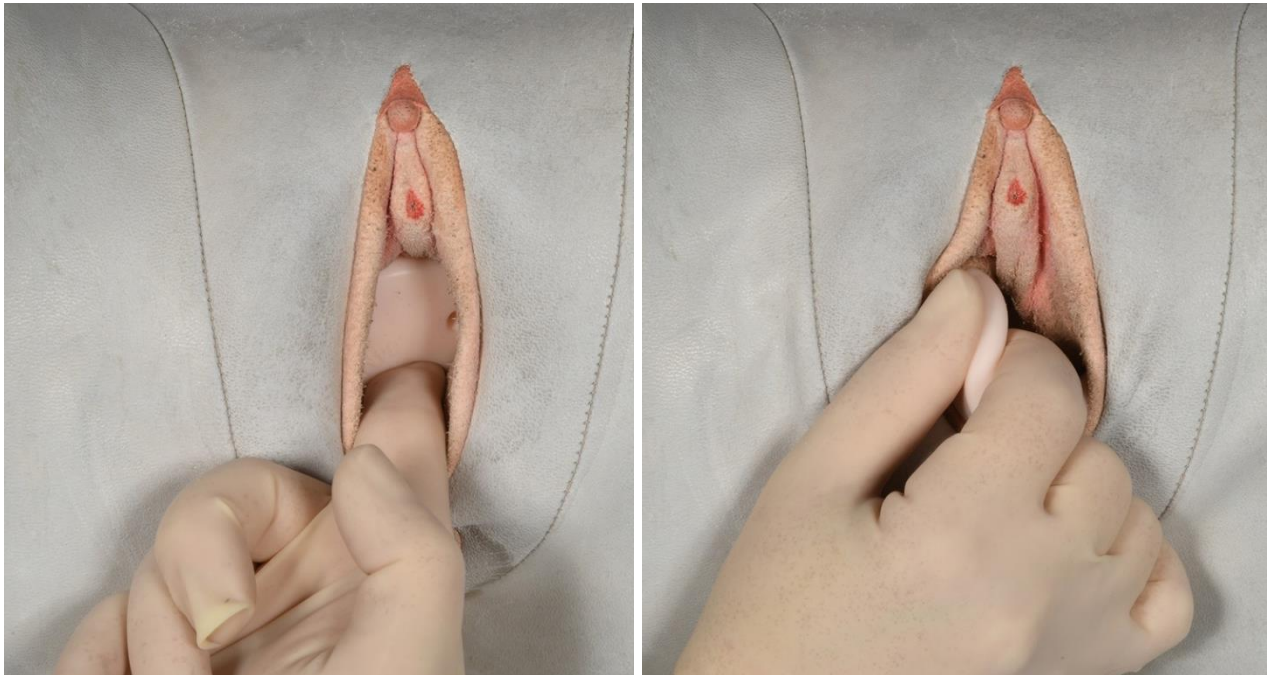
Fitting

The Shatz pessary is fitted in a similar way to a ring pessary. The concave side is towards the top of the vagina to allow mild suction.

Shatz pessary insertion



Shaatz pessary removal



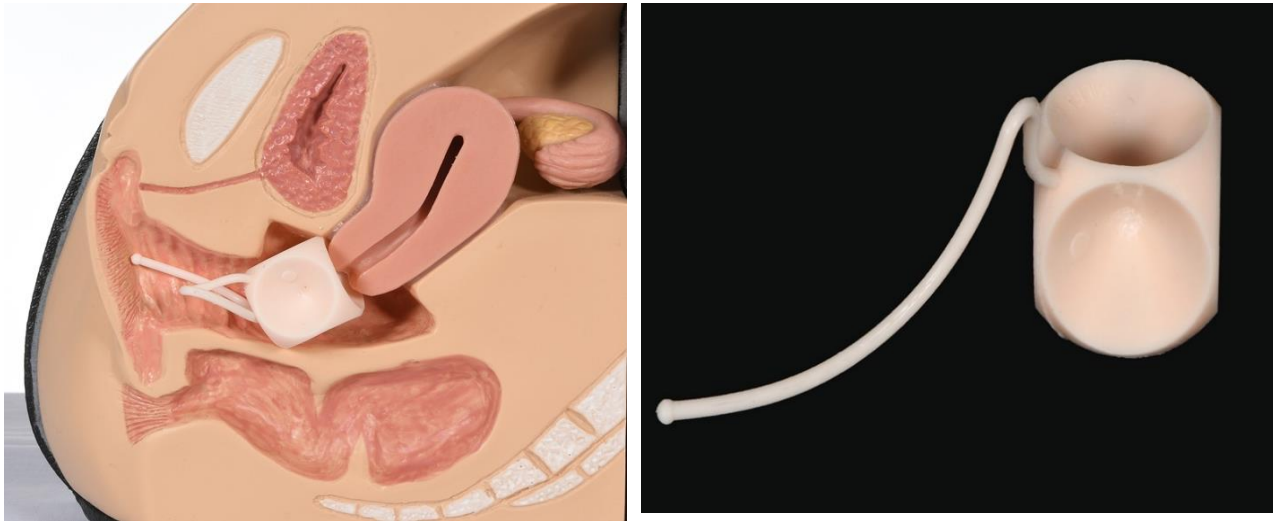
Removal

The pessary is removed by inserting one finger to the side of the plate to move it and release the suction and then into the large hole to bring the pessary down toward the introitus. The pessary is then turned so that the rim is almost parallel to the introitus. With one or two fingers of the other hand, press down on the perineum and slide the pessary out. For removals that are difficult, try tying a long piece of dental floss through the ports of the pessary and use this to pull down to allow for an easier removal.

Frequency of change/check

Most commonly, reviews take place every 3–6 months.

Cube/Tandem cube



Overview

The cube pessary has 6 concave sides that create a suction effect when in place in the vagina helping it to be retained. It is therefore often used in cases of more severe prolapse where other pessaries have failed. It is only suitable for a woman who can self-manage as it needs to be removed and cleaned daily. The woman will need a degree of manual dexterity to be able to manage insertion and removal. The pessary will need to be removed prior to sexual activity involving vaginal penetration.

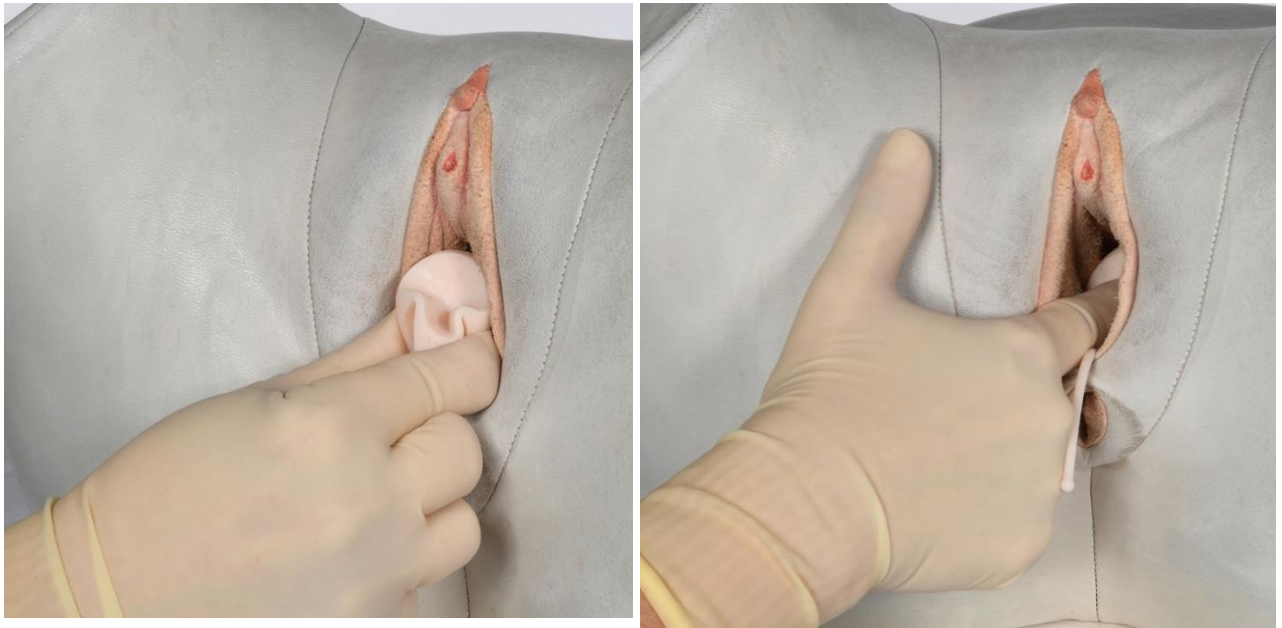
Materials and Sizes

The cube is made of silicone and available in a variety of different sizes ranging from 25–75 mm and is also available with or without drainage holes. The pessary would be washed with mild soap and water each night. Some cubes have drainage ports to allow the passage of fluids. Although they do not readily allow passage of menstrual flow.

Fitting

To insert it into the vagina, the cube should be pushed gently downwards into the vaginal space and then with downward pressure to the posterior vaginal wall whilst being turned gently to get past the vaginal entrance. Once inside the vagina, it should be pushed up as far as possible.

Cube pessary insertion



Cube pessary removal



Removal

Daily removal is considered advisable.

The string of the pessary is used to help locate the base of the pessary. The string should not be used to pull the cube down and out.

A finger should be inserted into the vagina to sweep around the pessary and move it gently to break the suction. Gentle bearing down if required may help to get a firmer grasp of the pessary. Twisting the cube slightly to ease it out of the introitus may be helpful.

Frequency of change/check

These need to be removed daily. Assessments by a HCP are routinely performed after the first 4–8 weeks of use and then at 3–6 monthly intervals thereafter to check the health of the vaginal walls.

Variations of cube pessaries

Tandem Cube



This provides additional support for a woman who is unable to keep the largest size cube pessary in place. It has 10 concave sites increasing the overall suction of the pessary to increase adhesion to the vaginal walls.

Donut



Overview

The Donut pessary is designed to fill the vaginal space. The Donut is used for more severe stages of prolapse, especially those where the uterus is still present. Given its overall volume, it can be used to reduce bothersome posterior wall prolapses and can often be useful in reducing prolapse in a woman with a large genital hiatus. Because of the shape and size, these pessaries are more difficult to remove, especially in the case of self-management. Sexual activity is less likely with a Donut in place filling the vaginal space.

Materials and Sizes

The Donut is made of flexible silicone. They are available in several sizes ranging from 51–95 mm.

Fitting

The pessary should be compressed between the thumb and forefinger. A finger should be used to depress the perineum. Holding the Donut parallel to the introitus, the pessary should be inserted into the vaginal using a corkscrew motion and pushed up to the top of the vagina. The cervix/vaginal vault should rest behind the Donut.

Removal

Hook one finger inside the centre of the pessary. Using the thumb and middle finger to compress the side of the Donut, angle the pessary and pull gently through the introitus using a finger on the other hand to press down on the perineum.

Frequency of change/check

Most commonly, reviews take place every 3–6 months.

Inflatable pessaries



Overview

Like the Donut pessary, the inflatable pessary works by occupying the space in the vagina. The pessary consists of the head, which is inserted into the vagina, and the stem which sits outside of the body. The stem has a bead in the closed end which controls the inflation and deflation. A separate bulb (hand pump) is attached to the open end of the stem for inflation. An advantage of the inflatable design is that it is inflated once it is in situ, thus making insertion more comfortable for some women. However, this pessary needs to be removed and cleaned every night so a woman must be willing to self-manage. The pessary can be removed prior to sexual activity. The inflatable pessary should not be left in place for more than 24 consecutive hours.

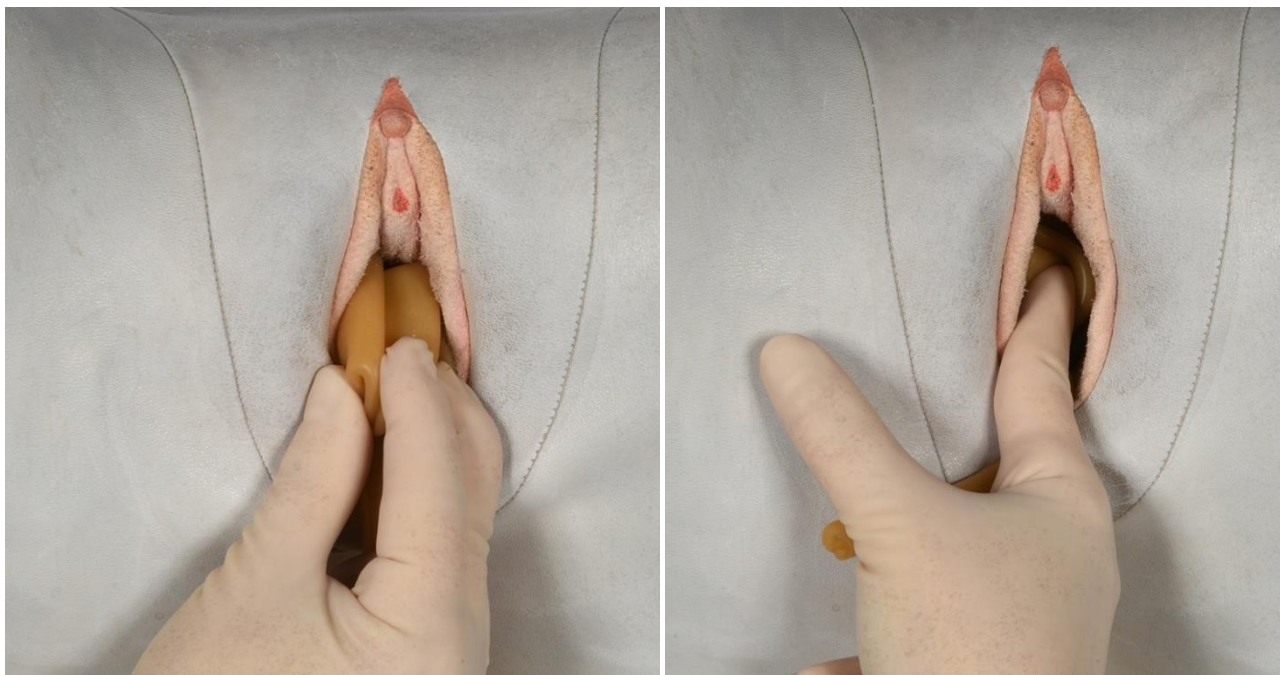
Materials and Sizes

Inflatable pessaries are made of latex or silicone. They are available in four sizes ranging from 51–70 mm. The latex inflatable pessaries cannot be used in a woman with a latex allergy and should not be used with any vaginal hormone creams as these contain a wax base that will deteriorate the latex.

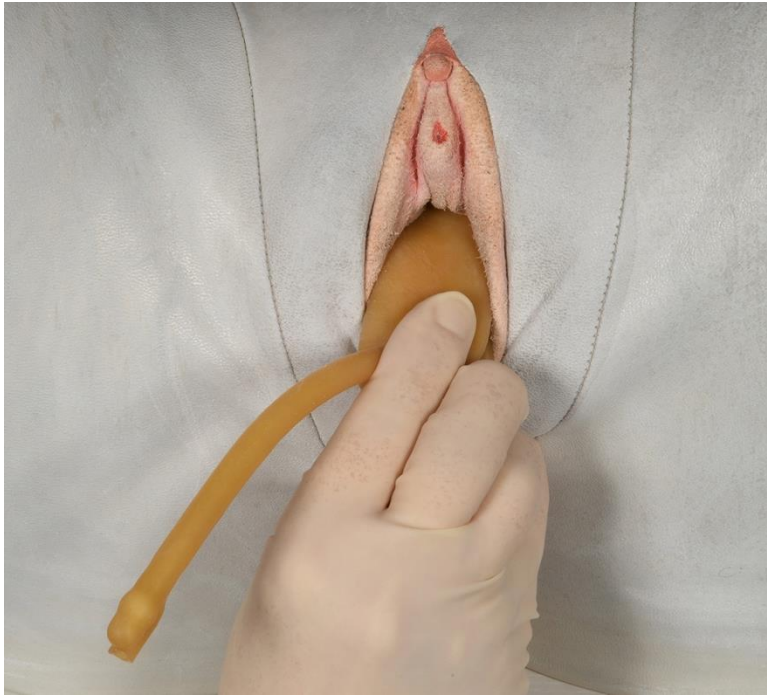
Fitting

The pessary is deflated by moving the bead to the closed end of the stem. The bulb is then attached into the open end of the stem. The head of the pessary is then inserted into the vagina so that only the stem protrudes. The pessary is inflated by squeezing the bulb and the inflation level is controlled by the number of pumps. Once inflated the bead in the stem is moved forward to close the air vent and the bulb removed. The stem can either be tucked into the vagina or left outside.

Inflatable pessary insertion



Inflatable pessary removal



Removal

The bead is moved into the closed end of the stem allowing the pessary to deflate. Using the stem as a guide the woman can grasp the deflated pessary and remove it. The stem should not be used to pull the pessary out.

Frequency of change/check

A woman needs to remove and wash the pessary with warm soapy water daily. HCP's will usually review after the first 4–8 weeks of use and every 6–12 months thereafter.

Vaginal Dish pessaries with knob/ urethral bowl



Overview

Dish pessaries are a circular vaginal pessary, with a cupped shallow bowl (with or without support) with a knob that is designed to lift the bladder neck. This elevation can reduce symptoms of stress urinary incontinence but as it can sit nicely behind the pubic bone it can also work effectively in supporting a large anterior prolapse with or without uterine descent where a ring has failed, whether there is incontinence or not. This can be useful, when a woman does not want a more complex pessary such as a Gellhorn, particularly if she wants to remain sexually active. Self-management is possible with this pessary.

Materials and Sizes

Pessaries are made of a soft flexible silicone material. They are sized in a similar way to a standard ring pessary but the knob will add to the general diameter (55–90 mm) so a smaller diameter may be needed against normal measurement. There is, however, some manufacturer variation of roundness of the knob and careful consideration needs to be given to some that have a squarer knob that provide less support.

The pessary with support has drainage ports to allow the passage of fluids. Although they do not readily allow passage of menstrual flow.

Fitting

The pessary is fitted by holding the two edges of the diameter with the knob at the top to compress the pessary. The opposite edge of the knob is inserted first towards the posterior fornix pushing the knob up behind the pubic bone.

Removal

The pessary is removed by inserting one finger into the large hole under the knob to bring the pessary down toward the introitus. Alternatively, put a finger over the top of the knob first and then remove. The pessary is gently then pulled down and the edges will generally collapse as it is removed.

Frequency of change/check

Most commonly, reviews take place every 3–6 months. If self-managing, this can be less frequent.

Other Pessaries

There are several other types of pessary available in the UK that have not been included in this section as they are very rarely used. These include (but are not limited to) the Gehrung, Hodge, Smith, Risser, Marland and Regula pessaries. Specific information related to these products can be found in the manufacturer's instructions.