



Vaginal atrophy after breast cancer

Women who have had breast cancer treatment but not yet gone through the menopause might find they develop symptoms such as hot flushes, night sweats and vaginal dryness.

These are symptoms of oestrogen deficiency, which occur naturally with age, but may also occur in younger women undergoing treatment for breast cancer.

Unlike some menopausal symptoms, such as hot flushes, which may go away as time passes, vaginal atrophy often persists and may get worse with time.

Today's increased use of adjuvant treatments (medications that are used after surgery/chemotherapy/radiotherapy) --which evidence shows reduce the risk of the cancer recurring-- unfortunately lead to more side-effects.

Your health and comfort is important, so don't be embarrassed about raising these issues with your doctor.

This leaflet offers some advice for what you can do to maintain the health of your vagina, your vulva (the external genitals) and your urethra (outlet from the bladder), with special attention to the needs of women who have had breast cancer treatment.

Why is oestrogen important for vaginal health?

The vaginal area needs adequate levels of oestrogen to maintain healthy tissue.

The vagina's epithelium, or lining, contains oestrogen receptors which, when stimulated by the hormone, keep the walls thick and elastic.

When circulating oestrogen decreases, the vaginal lining becomes thinner and drier.

A healthy vagina is naturally acidic, but with menopause it may develop a higher pH (become more alkaline) which leaves women more susceptible to urinary tract infections.

The vulval area also changes with ageing, as fatty tissue reduces and the labia majora (outer lips of the vagina) and the hood of skin covering the clitoris may contract. If sensitive areas become more exposed, chafing can occur.

Pelvic floor muscles become weaker and urination may become more frequent and difficult to control.

What symptoms occur with vaginal atrophy?

- Irritation, burning, itching, chafing, or other discomfort.
- Dryness due to decreased vaginal secretions which may also mean sexual intercourse becomes uncomfortable or painful.
- Light bleeding, because the vagina may injure more easily.
- Inflammation, known as atrophic vaginitis, which can lead to pain on urination and infection.
- Persistent, smelly discharge caused by increased vaginal alkalinity (higher pH) which is sometimes mistaken for thrush.

How are these symptoms related to my treatment?

- Chemotherapy: Patients can develop vulvar and vaginal burning due to inflammation. These are similar to the changes that occur in the lining of the mouth and gastrointestinal tract.
- Tamoxifen: Premenopausal women note dryness due to the anti-oestrogenic effect in the lining of the vagina, but in postmenopausal women, who already have lower levels of oestrogen, the change may be less marked.
- Aromatase inhibitors: Postmenopausal women with oestrogen receptor-positive breast cancer are often treated with these drugs – anastrozole (Arimidex), letrozole (Femara), or exemestane (Aromasin). Studies have shown more vaginal symptoms with aromatase inhibitor-only treatment than with tamoxifen-only treatment.
- Raloxifene: This drug (Evista) originally approved for treatment of osteoporosis, has been approved for breast cancer risk reduction since 2007. In post-menopausal women it has not been associated with adverse vaginal symptoms and does not affect sexual function. There is no good evidence about raloxifene's effects in premenopausal women.



How can I minimise irritation to the vagina?

- Wear underpants made of natural fibres such as cotton and change them daily. Consider going without undergarments when possible e.g. going to bed.
- Avoid, or at least limit, time spent wearing tight-fitting undergarments, pantyhose, jeans or trousers as this may lead to sweating. Also limit time in damp or wet bathers or exercise clothing.
- Wash clothing with non-perfumed or low-allergenic washing products. Avoid use of fabric softeners. Consider second-rinsing if symptoms persist.
- Avoid use of feminine hygiene sprays and douching. Avoid pads, tampons and toilet paper which are scented.
- Avoid shaving or waxing the genital area, particularly if irritation is present.
- Gently wash skin of the genital area only with plain water. Or, use soap alternatives such as Cetaphil, QV wash, or Dermaveen and avoid soap, liquid soap, bubble bath and shower gels. Always pat dry (don't rub).
- You can continue to be sexually active and in fact it may improve your symptoms. Sexual activities, whether with a partner or masturbation, improve blood flow and help maintain healthy tissue. Consider using a vaginal lubricant or moisturiser (see treatments, below).
- Practice safe sex, unless in a mutually monogamous relationship, in order to reduce genital infection.
- Quit smoking. Smoking increases atrophy by decreasing blood flow to the genital area and directly affecting vaginal cells, as well as threatening your overall health.

What treatments are available?

- Cool washes or compresses may help itching and mild discomfort. Dissolve half a teaspoon of bicarbonate of soda in 1 litre of water and apply gently with a cloth a few times a day. Softly pat dry. Avoid scratching and keep the area cool and dry. See your doctor if symptoms persist or if they get worse with this treatment.
- Vagisil cream comes with a pH testing kit and offers relief for itching and dryness. However it is not generally recommended because local anaesthetic creams may cause irritant or contact dermatitis of the vulva.
- Vaginal moisturisers can plump up cells in the vagina. One of the most popular non-hormonal preparations is Replens, a low pH gel which comes with an applicator.
- Vaginal lubricants, such as Sylk or K-Y Jelly, may reduce friction and so make intercourse more comfortable. In some women K-Y Jelly stings because of alcohol/preservatives. Water-based lubricants can be used safely with latex condoms. However oil-based lubricants should never be used with latex condoms.
- Natural oils--such as sweet almond or avocado--may help, but some oils and creams--such as tea-tree oil and paw-paw ointment--can cause contact dermatitis, increasing itchiness and discomfort.
- Vitamin E, either taken orally or applied topically (as ointment) can reduce symptoms.
- Phyto-oestrogens such as Phyto-Soya are used by some women but there is a lack of evidence for their effectiveness and safety, and they are not recommended for women who have had breast cancer.
- Pelvic floor relaxation exercises may help and seeing a pelvic floor physiotherapist who may offer advice on the exercises and techniques to make penetration easier.



Sexual issues after breast cancer treatment

Sexual problems occur in many women who have had treatment for breast cancer, and you may feel the need to obtain professional help for these difficulties.

Here are some things that might assist:

- Many women benefit from the advice of a physiotherapist who specialises in treatment of the pelvic floor.
- A physiotherapist can recommend techniques for overcoming sexual problems. Using several techniques together--such as relaxation, massage, pelvic exercises and lubricants--can be helpful.
- Tiredness is often a consequence of therapy and a 'turn off' when it comes to sex. Ensure that you have adequate rest, including some mid-day rest if necessary, and try to enlist relatives or friends to help with housework and child-minding.
- Ask your GP about counsellors who specialise in helping couples who are experiencing problems in their sexual relationship.

Prescription treatments for vaginal atrophy

Oral HRT is not recommended for breast cancer survivors because oestrogen can trigger breast cancer. Tibolone (Livial) is also not recommended because it may interfere with treatment.

Vaginal oestrogen, which comes in pessaries or creams inserted with an applicator, may be recommended because it acts locally, with only tiny amounts being absorbed systemically.

However there are some issues to consider:

- Some absorption may occur when you begin the treatment because the lining of your vagina is thin. After about a month the lining becomes healthier and less oestrogen will be circulating in your blood.
- Oestrogen preparations differ in absorption e.g. oestradiol (Vagifem) has a more significant effect on serum oestrogen levels compared to oestriol (Ovestin).
- Vaginal oestrogen needs to be inserted regularly, in accordance with the instructions, regardless of when you have intercourse. Vaginal oestrogen is effective only while you are using it, so you will need to renew your prescription to continue to get the benefit.
- There is insufficient evidence to conclude that vaginal oestrogen is completely safe because even minimal changes of circulating oestrogens may be detrimental in patients with hormone-sensitive cancers. It's best to try non-hormonal treatments first.
- Women taking aromatase inhibitors in particular are advised against vaginal oestrogen. The effectiveness of aromatase inhibitors in suppressing cancer recurrence depends on suppression of oestrogen, so even tiny circulating amounts could interfere with the success of the cancer therapy.