

Vulval Intraepithelial Neoplasia (VIN)



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What is it?

Vulval intraepithelial neoplasia (VIN) is a condition where there are pre-cancerous cells in the skin of the vulva. We use the word pre-cancer, NOT because the cells are cancerous or you have cancer, but because the cells MAY (or MAY NOT) develop into cancer over a period of years. The exact relationship between VIN and vulval cancer remains unknown because so few studies have been carried out.

Before discussing VIN it is important to remember that skin is divided into three layers. The epidermis or top layer is less than one millimetre thick and is constantly being shed.

In VIN, the pre-cancer cells are located within the epidermis or the very top layer and are only a millimetre or so thick. The abnormal cells do not penetrate deep down into the dermis so as a consequence, it is easy to see on the surface of the skin with the naked eye the affected areas.

Generally VIN is divided into three stages — I, II or III — depending on how abnormal the cells are. VIN III is the commonest presentation among women and this means that the abnormal cells are present throughout the epithelium (remember it is only a millimetre thick!). In VIN I only a third of the cells in the epithelium are abnormal, whereas in VIN II, two thirds of the cells in the epithelium are abnormal.

What are the symptoms?

The symptoms do vary from woman to woman. Some have no symptoms and the area of VIN is noticed on a routine visit to the doctor. Other women complain of vulval pain or itching which can be quite severe. Others have painful sex and some women notice a lump or thickening of the vulval skin.

What do you find on examination?

Again, like the symptoms, this is variable among different women. Some women have a single area of red or white thickening or ulceration of the skin, others have several abnormal areas.

What investigations should be done?

VIN is diagnosed by a vulval biopsy where usually a small pea-sized amount of skin is removed from the affected area. The procedure is carried out under local anaesthetic using a dissolvable suture. A biopsy is essential so that the pathologists can see down the microscope to confirm the diagnosis of VIN (and not other skin conditions) and also to see exactly what degree of abnormal cells there are. Sometimes two or three biopsies are required

What causes it?

This remains unknown. There do appear to be two age groups who get VIN: women in their 60s to 70s and women in their 30s to 40s. In women in their 30s and 40s, VIN does appear to be associated with the family of 'wart' viruses (human papilloma viruses, HPV) which can cause change in the appearance of the cells down the microscope causing VIN to develop. VIN is noticed to be more common among women who smoke, but whether there is a direct relationship remains unknown.

How common is it?

VIN remains an uncommon condition. However it is generally felt that more and more women are being diagnosed with VIN. This is either because the disease is becoming more common or because more women are being accurately diagnosed.

How is it treated?

There is not one type of treatment to suit all women with VIN and the treatment offered to you should be tailored to suit your needs. You will obviously have to discuss this with your doctor. The type of treatment will depend on several factors including one or more of the following:

- The severity of your symptoms
- Where the affected area is on the vulva
- How large the affected area is
- How fit you are for treatment

Treatments

Take a 'wait and see' approach

Many women with VIN do not have any treatment at all and are simply kept under review. This is often recommended for women with large areas of VIN and in women who have no symptoms. If you are pregnant this may be an option. Sometimes VIN can resolve spontaneously and so treatment may not be needed at all. A decision about treatment does not need to be made immediately unless there are concerns about a cancer.

Surgery

Removal of the area has advantages and disadvantages. Removing the area will hopefully cure localised areas that cause symptoms. Also it may be necessary to remove some of the vulval skin so that it can be examined under the microscope to exclude cancer development. The disadvantages relate to having the surgery and recovery from the skin removal. For very large areas that need removal there can be distortion of the vulval

anatomy and shape, but many areas of VIN that are removed heal without any serious scarring. Ask the surgeon if you have any concerns.

The greatest difficulty with managing VIN is that following treatment, VIN can recur. As consequence many women will be put on long term surveillance but this can be self inspection and reporting back to the doctor if there are any areas of concern which develop in the vulval skin.

Topical cream treatment

Imiquimod (Aldara) cream uses the immune system to attack the areas of VIN. This means it uses the body's natural defences to kill the pre-cancer cells in the skin. It does this by releasing a number of chemicals called cytokines. The main advantage of Imiquimod cream (apart from avoiding surgery) is that it will not cause scarring so has the advantage of better cosmetic results and you can put it on yourself at home. The disadvantages are that many patients notice a burning sensation when applying the cream which improves in most cases as the abnormal area heals. Unfortunately a few patients are not able to tolerate this treatment due to these effects.

Another advantage of the cream is that if it is effective in healing the abnormal area but the VIN recurs, the cream can be used again.

Currently there are trials of different creams for the treatment of VIN to find out which are the most effective and prevent future recurrences of the disease.

VIN and vulval cancer

Vulval cancer is an uncommon cancer, with only around 1,000 cases diagnosed in the UK each year. Although VIN is regarded as a precancerous condition, up to 20 per cent of women diagnosed initially with VIN will already have an underlying cancer. If VIN is treated, the subsequent risks of VIN patients developing cancer are around 3 to 5 per cent, so long term follow-up is important.

What can I do?

Keep a close eye on your own vulval skin and be alert to any changes.

If you do have symptoms, then discuss the creams that you can apply with your doctor. Avoid inappropriate antifungals and practise good vulval hygiene.

Smoking has been referred to as a risk factor for VIN. Stopping smoking may make a difference.

Support

The Vulval Health Awareness Campaign
<http://vhac.org>

<http://vulvalpainsociety.org/vps>

NHS Constitution. Information on your rights and responsibilities.
Available at **www.nhs.uk/aboutnhs/constitution**

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How to contact us:



Department of Obstetrics and
Gynaecology
Cotswold Outpatients Department
Southmead Hospital Bristol
BS10 5NB



0117 414 6769



www.nbt.nhs.uk/gynaecology

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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