

VIN is a skin condition affecting the vulva (entrance to the vagina). The skin can be sore and itchy. The diagnosis is made by looking at a small piece of skin under the microscope. The cells look unusual as they grow at an abnormal rate.

### **The cause**

VIN is thought to be caused by a virus known as the human papilloma virus. The virus can also cause warts and affect the skin in the vagina or cervix.

Lotions, potions, soaps or perfumes are not to blame. A skin allergy test is valuable because it can highlight substances that cause further (but separate) irritation and these can be avoided. Intercourse can irritate the skin for several days but it does not cause further damage.

The abnormal cell growth causes pain or itching, especially at night. The natural impulse is to scratch because this stimulates nerve fibres carrying pain messages and this swamps the irritation sensation by replacing it with pain. Unfortunately relief from scratching is temporary and scratching causes more inflammation and further irritation. Although it can make the discomfort worse, scratching does not cause long-term damage.

### **Treatment**

Established VIN is not easily curable but it may resolve spontaneously for no apparent reason. This is unusual but symptoms are variable and there may be long periods of remission. The severity of discomfort is also variable but becomes worse if there is inflammation. Treatment is to reduce the inflammation and make the symptoms more bearable.

### **Avoiding irritants**

Because the cause of VIN is not due to any chemical infection there is no specific agent to avoid. Sexual intercourse is not harmful but can cause discomfort. The irritation occasionally caused by the acidity of semen can be minimised by collecting it in a condom or female condom. The effects of friction due to intercourse can be minimised by prior use of emollients (moisturisers) or barrier creams.

### **Testosterone Ointment**

Testosterone ointment helps the vulval skin grow normally and it can be used to stimulate the formation of new and healthy skin. Unfortunately, the effects take at least 6 weeks to work. Regular use of Testosterone will not be rewarded by immediate relief and only causes a mild improvement in the long-term. It needs to be used regularly twice a day. Testosterone does not always help but it is safe and rarely has side-effects unless it is used for more than a year. The only disadvantage is that it has to be applied to the vulva and you may be already using

steroid creams. If it is used for several years it can alter the pattern of vulval hair growth and can cause the clitoris to enlarge. Use for more than a year without a break is not recommended.

### **Steroid Creams**

Cortico-steroids are used to treat all sorts of inflammatory diseases. They will not help the underlying condition but they will help the irritation due to scratching. They take several days to work and the relief can last for a week. We do not know if long term use of steroid cream is safe in this condition and therefore we recommend using steroids sparingly.

There are many types of steroids. The steroid in creams is different from the illegal anabolic steroids used by athletes and should not be confused with steroid tablets that have side-effects. Giving steroids in a cream means that the treatment only affects the area it is applied too and has no other effects. Steroids reduce inflammation and itching. They are usually very effective and should be used if the skin is inflamed.

There are four different strengths of steroid creams. Generally, we recommend using the weakest cream that reduces symptoms. In the vulval clinic we often start with the weakest (Hydrocortisone) and change to Locoid, Eumovate or Betnovate if symptoms persist. In severe cases we use the strongest steroid, Dermovate. The ointment should be used twice a day, morning and night.

### **Soothing Agents**

Soothing Agents include:-

- Emollients,
- Local Anaesthetic Agents,
- Antihistamine Ointments
- Anti-Itch Ointments.

They help itching but have no effect on the underlying condition. Some work for some people and the only way to find out if the cream suits you is to try it.

### **Emollients**

Emollients soothe, smooth and hydrate (moisturise) the skin. Their effects are short-lived but they are safe and can be used as often as necessary. There are hundreds of different emollients on the market and there is no evidence that one is any better than another. It is best to avoid hydrous wool fats (e.g. Lanolin) or ointments containing antiseptics, antibiotics or perfumes, as long-term use can sensitise the skin.

Popular emollients include Aqueous cream, Emulsiform, paraffin (Vaseline), Nivia or E45. Emollients can also be added to bath water (e.g. Bath E45, Emulsiderm or Oilatum). Nappy rash ointments (e.g. Zinc, with or without

castor oil) may also help form a barrier and protect the skin from the irritant effects of intercourse or spilt urine.

### **Local anaesthetic agents**

Local anaesthetic gels sometimes have a small numbing effect and can be useful at night and help you get to sleep. Unfortunately, the skin can become sensitive after prolonged use and this can make irritation worse.

### **Antihistamine ointments**

Topical antihistamines are not very effective for VIN. This is because they are designed to work to reduce the inflammation associated with allergies or skin bites, not the itching caused by VIN. Anthisan or Caladryl may be worth trying, but long-term use is not recommended as they can cause skin sensitisation.

### **Anti-itch ointments**

Calamine cools the skin and this can relieve irritation for a short while. It can be used as frequently as required but has no effect on the disease process. However, it is worth using if it provides some relief from the sensation of itching.

Compounds containing Crotamiton (e.g. Eurax) also reduce irritation but like calamine, have no effect on the underlying disease.

### **Anti-itch tablets**

Anti-histamine tablets have a general anti-itch effect. One disadvantage is that they can make you drowsy. This means they cannot be used if you need to operate machinery, drive or concentrate during the day but they can be used at night. They are only of limited use and their effectiveness is variable.

### **Disinfectants, Alcohol and Cleansants**

These have no effect and are unnecessary. Douching can cause further irritation.

### **Surgery**

The affected area of skin can be removed and replaced with new skin. Unfortunately the VIN can return. Surgery cannot remove the underlying condition but it can remove severe abnormalities and this may be important when it looks as if the cells are turning to cancer.

### **Injections**

Injections of interferon has been tried in the past but the results are disappointing. Steroids mixed with local anaesthetic are probably more effective but not superior to creams. For these reasons we rarely recommend injections.

### **Ultraviolet and x-ray treatment**

There is some evidence that controlled use of superficial x-rays or ultraviolet light can bring relief from discomfort. It can stimulate the skin to thicken and reduce symptoms temporarily. This does not mean that the vulva should be exposed to the sun. The vulva is rarely exposed and this combined with the thinness of the skin and lack of

protective pigment means that there is a significant risk of sun burn even with moderate exposure. The dose of ultraviolet light has to be measured and controlled and should be given in hospital.

### **Homeopathy, acupuncture, herba medicine and diet**

There is no evidence that homeopathy, acupuncture or herbal medicine make any difference to the condition. Homeopathy and acupuncture are safe and many people try them. Herbal medicines are promoted for many unremitting conditions. Provided unrealistic exceptions are not raised, little harm is likely to result from trying one of the variety of preparations. Techniques relying on the elimination of mythical toxins from the body are also popular. As VIN is due to a virus, not a toxin this method of alternative medicine has no scientific merit. However, Medicine is not omnipotent, does not have all the answers, and dietary changes do work for a limited number of conditions. It is not logical to believe that dietary changes affect chronic inflammatory idiopathic vulvitis but it does little harm to try.

### **Experimental treatments**

Studies are starting with a new antiviral cream (Aldera). The consequences and side effects are unknown.

### **Risk of cancer**

VIN is usually limited to the vulva but can involve the anus, vagina and cervix. The condition is graded as mild, moderate and severe. On rare occasions the condition can progress to skin cancer. The risk of this happening is not known and some experts believe this never happens. However most gynaecologists believe there is a risk and this means the skin should be examined regularly and smears should be taken from the cervix. The nurse or doctor would look for cracks that do not heal, ulcers, lumps and other skin changes. Early symptoms include bleeding or increasing soreness. These early changes are important as they allow prompt diagnosis before the cancer spreads.

When ever there is any doubt the doctor normally recommends that a small piece of skin is removed and analysed by the laboratory. This helps diagnose any change and allows early treatment of any developing cancer before it is too late

It is important to put this into perspective. Vulval cancer is rare and a slow disease. It usually causes bleeding, ulcers, skin cracks or a sudden increase in itching before the cancer develops. For this reason it is worth someone inspecting your vulva every year (general practitioner or vulval clinic nurse) so that early changes can be identified and treated appropriately.

### **More Information**

Informal support is available from the Vulval pain society (PO Box 20, Worsley, M28 7AN) and literature can be obtained from the National Vulvaodynia Association (USA), PO Box 19288, Sarasota, Florida, USA 34276-2288.