

Lichen sclerosis is a common skin condition in women and usually affects the vulva (entrance to the vagina) or anus. There are no known causative agents. Lotions, potions, soaps or perfumes cannot be blamed and it is not caused by any germ or sexual activity. It is probably an auto-immune condition. This means that molecules called antibodies cause a biological reaction in certain areas of skin and the result is inflammation. Eventually, continued inflammation causes the skin to become thin. In severe cases the lips surrounding the vagina (called labia) begin to stick together and can bury the clitoris. The skin can tear easily but will heal again.

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

Established lichen sclerosis is not usually curable. The itching or soreness is variable and depends on the degree of inflammation. Treatment is to reduce the inflammation and make the symptoms more bearable.

### **Steroid Creams**

Steroids are used to treat all sorts of auto-immune diseases. They work by reducing the biological reaction between antibodies and the skin. This reduces the inflammation and itching. Giving steroids in a cream means that the treatment only affects the area it is applied to and has no other effects.

There are many types of steroids. For example, some athletes use illegal anabolic steroids and some diseases need treatment with cortico-steroid tablets. These have side-effects, but steroid creams are different and safe. They should not be confused with other sorts of steroids.

There are four different strengths of steroid creams. Generally, we recommend using the weakest cream which reduces symptoms. In the vulval clinic we often start with the weakest (Hydrocortisone) and then change, if symptoms persist to Locoid, Eumovate or Betnovate. In severe cases we use

Dermovate. The ointment should be used twice a day, morning and night. Do not become confused with the normal advice about long-term use of steroid cream. In most dermatological conditions, we discourage continued use but this does not apply to lichen sclerosis. It is safe to use steroids regularly on the vulva because it treats the cause, reduces inflammation and destruction of the skin and we think long-term use of steroids may even prevent thinning of the skin.

### **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 six 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.

### **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), Zinc, with or without castor oil or E45. Emollients can also be added to bath water (e.g. Bath E45, Emulsiderm or Oilatum).

### **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 itching worse.

### **Antihistamine Ointments**

Topical antihistamines are not very effective in lichen sclerosis. This is because they are designed to work to reduce the inflammation associated with allergies or skin bites, not the inflammation caused by lichen sclerosis. 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 itching 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 itching 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 on lichen sclerosis and are unnecessary.

### **Surgery**

The affected area of skin can be removed but lichen sclerosis usually returns to the vulva. Surgery cannot remove the underlying condition (antibodies causing skin inflammation).

### **Other Conditions**

Lichen sclerosis is usually limited to a small area of skin. On rare occasions the antibodies that cause inflammation can be associated with other proteins

that cause other diseases. Although this is rare, it is worth having a blood test to detect the onset of such conditions. These antibodies can affect vitamin B12 absorption and the thyroid gland. Neither is severe because the treatment is simply to replace vitamin B12 or thyroid hormone, but it is good to identify any deficiency early before it causes symptoms.

Lichen sclerosis is also associated with skin cancer limited to the vulva. This is very rare. It is important to put this into perspective and the risk is only 2%. In other words, breast cancer is seven times more common in healthy women than vulval cancer in a woman with lichen sclerosis. More importantly, vulval cancer is a slow disease and usually causes bleeding, ulcers, skin cracks or a sudden increase in itching long 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.

**Nick Johnson, Consultant Gynaecologist**  
2013