



FOX-FORDYCE DISEASE

What are the aims of this leaflet?

This leaflet has been written to help you understand Fox-Fordyce disease. It explains what Fox-Fordyce disease is and why it occurs. This leaflet also details what treatments are available, and where you can get more information.

What is Fox-Fordyce disease?

Fox-Fordyce disease is a rare skin disorder affecting the apocrine sweat glands. These are special sweat glands found in the armpits, genital region and breasts that produce a more dense secretion than the normal or 'eccrine' sweat glands found elsewhere on the body. Patients with this condition experience itchy bumps on the skin around the hair follicles.

What causes Fox-Fordyce disease?

The disease is believed to be caused by blockage of the apocrine sweat glands. It is not yet known why these glands become blocked. Fox-Fordyce disease commonly occurs under conditions of excess heat, humidity and stress. It can develop in anyone at any age, but most commonly arises in women of child-bearing age. Hormones are therefore believed to play a role, but the exact link has not yet been discovered.

Is Fox-Fordyce disease hereditary?

No, Fox-Fordyce disease is not hereditary.

What are the symptoms of Fox-Fordyce disease?

The rash can be very itchy, especially when patients are experiencing high levels of stress or emotion. It is also worsened by heat and friction, and may become troublesome at night.

What does Fox-Fordyce disease look like?

Fox-Fordyce disease usually appears as small fluid-filled blisters, skin-coloured spots or darkened spots at the base of the hair follicles.

How is Fox-Fordyce disease diagnosed?

The diagnosis is normally made “clinically,” from a patient’s history and by examining the appearance of the rash. Occasionally a skin biopsy may be performed to rule out other diseases. A skin biopsy is when a small sample of skin is removed and examined under a microscope.

Can Fox-Fordyce disease be cured?

There is no simple cure for Fox-Fordyce disease. In some people, it improves on its own. In the meantime, the symptoms can be controlled to varying extents with treatments.

How can Fox-Fordyce disease be treated?

To date large treatment trials have not been carried out. However, available treatment recommendations come from case reports in the research literature and so the advice is limited by the lack of evidence. Treatment is therefore difficult as no single treatment has been shown to be very effective.

Topical Therapies (treatment applied to the skin):

There are a number of topical therapies. Gels and lotions are better than the more greasy creams and ointments.

- Topical steroid creams can relieve the itching. However, strong steroids should not be used continuously as they may cause thinning of the skin. Steroids have been injected into problematic areas with some success but again there is a risk of causing skin thinning.
- Topical calcineurin inhibitors (e.g. tacrolimus or pimecrolimus) can also be used to calm itching and do not cause skin thinning, but can cause a burning sensation.

- Topical retinoids such as tretinoin or adapalene may be used to try and reduce the rash, but can cause further skin irritation.
- Topical antibiotics such as clindamycin have also been used successfully.
- Phototherapy, using an ultraviolet light may be used, but careful consideration is needed as light treatment carries an increased risk of developing skin cancer, particularly with long term use.

Oral Treatments (those taken by mouth):

- Antihistamine tablets can be used to control the itching, especially if it is interrupting sleep. Antihistamines are normally well tolerated with few side effects, but may cause drowsiness.
- The estrogen based oral contraceptive pill has been effective in women with Fox-Fordyce disease by altering hormone levels but when treatment is stopped, the rash is likely to recur.
- Oral isotretinoin (also known as Roaccutane) is a drug that can improve symptoms whilst it is being taken. This drug can cause side effects including birth abnormalities. It is used with caution in women of child-bearing age: a pregnancy prevention programme needs to be followed during treatment and for 1 month after stopping the medication.

Surgical Options:

Surgery using a laser may be helpful to remove the affected areas and therefore attempt a cure or the area may be cut away, but is likely to lead to scarring.

Self care (What can I do?)

Try not to pick and scratch the area as this can make the situation worse and lead to infection. Avoid putting anything irritating onto the areas. Avoid greasy creams as they can cause further blockage of the apocrine sweat glands. Avoiding excessive heat, humidity or stress does help some people.

Where can I get more information about Fox-Fordyce disease?

Web links to detailed leaflets:

<http://www.dermnetnz.org/hair-nails-sweat/fox-fordyce.html>

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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