Zoon’s (Plasma Cell) Balanitis

What are the aims of this leaflet?

This leaflet has been written to help you understand more about Zoon’s balanitis. It tells you what this condition is, what causes it, what can be done about it, and where you can find out more about it.

What is Zoon’s Balanitis?

Zoon’s balanitis describes a form of chronic inflammation of the glans penis and foreskin, which affects middle-aged to elderly men who have not been circumcised.

The word Balanitis is derived from the Greek word Balanos, which means ‘acorn’. The ending ‘-itis’ stands for inflammation. Balanitis therefore means inflammation of the glans penis. Zoon’s balanitis is named after Professor Zoon, a Dutch dermatologist, who described the condition in 1952. In addition to the glans penis, the foreskin is often involved.

It has also been called ‘balanitis circumscripta plasmacellularis’ because the patches are well defined, and many so-called plasmacells may be seen when examining affected skin under the microscope. Plasmacells are white blood cells present in this type of chronic inflammation.

What causes Zoon’s Balanitis?

It is thought that in Zoon’s balanitis the foreskin does not function properly, often because another underlying skin condition exists. Old skin cells, drops of urine, soap particles and the germs always present on skin are trapped by this ‘dysfunctional’ foreskin. This leads to irritation and inflammation of the foreskin and the glans penis underneath it. Zoon’s balanitis is not caused by an infection, and cannot be passed on to the sexual partner.
However, a similar condition has also been described in women affecting the vulva.

Zoon’s balanitis may be present on its own, or more often is a sign of the underlying skin condition *lichen sclerosus*. This skin condition can make the foreskin tighter and more difficult to retract, causing it to not function properly.

It has been discussed if Zoon’s balanitis is entirely harmless, or may in some men eventually lead to skin cancer, or simply mask a different pre-cancerous condition. This pre-cancerous condition is called Erythroplasia of Queyrat and can look similar to Zoon’s balanitis.

**Is Zoon's Balanitis hereditary?**

No, Zoon’s balanitis is not hereditary.

**What are the symptoms of Zoon’s balanitis?**

Often, Zoon’s balanitis looks worse than it feels, and may cause very little discomfort, if any. It can however be sore, itchy or cause blood staining of underwear.

**What does Zoon's balanitis look like?**

Glistening, moist, bright red or autumn brown patches are sharply demarcated (defined) from the surrounding normal-looking skin. Some dark red or brownish stippling (numerous small dots or specks) may be seen. The distribution is often somewhat symmetrical on the glans penis and adjacent foreskin.

**How is Zoon's balanitis diagnosed?**

The diagnosis can be made by a doctor after carefully examining your skin. Sometimes a small skin sample may be taken and checked under the microscope to confirm the diagnosis and check for possible underlying conditions, as mentioned above. This is called a skin biopsy and requires a local anaesthetic injection and possibly stitches to close the wound, leading to a small scar.
Can Zoon’s balanitis be cured?

Usually Zoon’s balanitis runs a chronic course over many years. Sometimes it can be improved with altered washing habits and the use of creams, and some good results have been reported with certain lasers.

Cure of Zoon’s balanitis is achievable by circumcision, a surgical procedure removing the foreskin.

How can Zoon’s balanitis be treated?

Steroid creams or ointments of mild to potent strength, with or without the addition of anti-bacterial or anti-yeast agents may be prescribed by your doctor and can be used for short periods intermittently. Your doctor will discuss with you how to use these creams.

Newer forms of eczema creams, so-called calcineurin inhibitors, have been used with some success in Zoon’s balanitis. However, because of the doubt about long-term cancer risks, they can currently not be routinely recommended.

Surgical lasers such as the Erbium:YAG or Carbon Dioxide laser have been used to re-surface the skin, which does require some kind of anaesthetic. Layer by layer of skin is lasered away until all the diseased tissue has gone. The area is then left to heal from the bottom up. These laser treatments are not commonly undertaken in the NHS.

Self care (What can I do?)

The skin of the glans penis needs to be washed once or twice a day, after fully retracting the foreskin. Instead of using soap, washing with a cream such as an emulsifying ointment, sometimes with the addition of an antiseptic ingredient, can be helpful.

Because Zoon’s balanitis may mask other underlying, possibly pre-cancerous skin changes, it is good practice to keep an eye on your skin. Anything unusual, for example deeper sores which do not heal or areas of thickening, should be reported to your doctor.

Where can I get more information about Zoon’s balanitis?

Web links to detailed leaflets:

http://www.dermnetnz.org/site-age-specific/plasma-cell.html
For details of source materials use 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: its contents, however, may occasionally differ from the advice given to you by your doctor.

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

BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET
PRODUCED MARCH 2013
REVIEW DATE MARCH 2016