



Preputial pathology

Foreskin concerns

What is it?

The prepuce is the medical name for the layer of skin over the glans (head of the penis). It is a normal part of the penis and acts to protect the sensitive and delicate tissues of the glans.

Common concerns

Can't be pulled back

At birth the prepuce is nearly always non-retractable (can't be pulled back). It remains this way for some time. This is due to two factors:

- attachments (adhesions) between the inner layer of the prepuce and the glans
- tightness of the preputial ring' created by the skin folding in on itself

The prepuce will become retractable when the adhesions have separated and the preputial ring has softened to become more 'stretchy'. This will occur sometime between infancy and puberty. 99% of foreskins are retractable by puberty.

White lumps - smegma

As the adhesions are separating, there may be a build up of sloughed skin cells. These accumulate as white lumps and may be seen through the skin, or discharge from under the prepuce. This is called smegma. It is normal and not an infection.

Inflammation – balanitis or balanoposthitis

The prepuce or penis may become irritated from the urine trapping, with the skin becoming red, sore or swollen. This is usually a chemical reaction to prolonged contact with urine. Simple bathing in warm salt water is usually enough to settle the symptoms, if commenced early. Panadol is useful for discomfort. Antibiotics are rarely required.

An episode of balanitis is not usually indication for aggressive surgical intervention like circumcision.

Pathology

Balanitis xerotica obliterans (BXO)

BXO is a condition that may affect the prepuce, glans (the head of the penis) and urethra (urinary channel). It is an aggressive scarring condition, associated bleeding and infections. It may cause a foreskin that could previously retract to become non-retractable.

There may be difficulty with urination due to a very tight preputial opening. This is extremely rare before 8 years of age. It affects as few as 0.6% of all boys by the age of 15 years. This condition is a recognised medical indication for circumcision.

Paraphimosis

If the prepuce has been retracted and not returned, the glans and inner prepuce skin may become very swollen. When this happens, the foreskin is stuck in the retracted position. This is called paraphimosis and requires urgent medical attention.

Compression bandage can be used to reduce the swelling and allow the prepuce to be brought back to a normal position over the glans. It is not usually an indication for circumcision.

Hooded prepuce

This describes an abnormality in the shape of the prepuce, in that it doesn't form a complete ring around the glans. It may be associated with hypospadias, a developmental abnormality of the penis. It is essential that this be assessed before any surgery on the penis (such as circumcision for social or religious reasons) is considered.