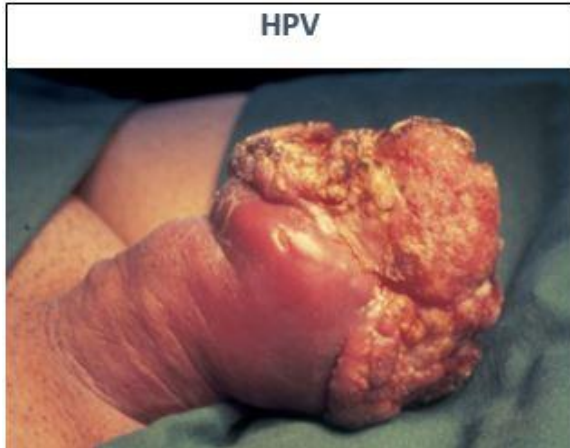


FORESKIN COMPLICATIONS

WARNING:
photos are graphic and disturbing

This document would not have been possible without the extensive contributions of Melanie Lindwall Schaab, an admin for the [Facebook.com/CircumcisionResource](https://www.facebook.com/CircumcisionResource) page.

FORESKIN COMPLICATIONS



HPV (HUMAN PAPILLOMA VIRUS)

The lifetime risk of contracting HPV for people in the U.S. with at least one opposite sex sexual partner is about 84.6% for women and 91.3% for men (Chesson, 2014)

Men who have not been circumcised (have had the foreskin of the penis removed) are more likely to be infected with HPV and pass it on to their partners. Men who are circumcised have a lower chance of getting and staying infected with HPV.

Complications

- Anal cancer
- Mouth and throat cancer

Complications in men

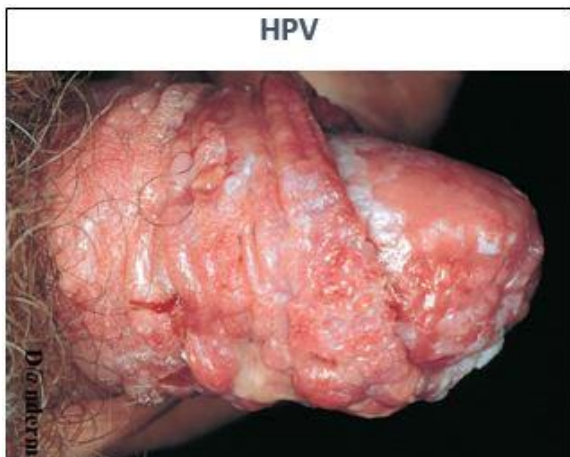
- Genital warts
- Penile cancer

Complications in female partners

- Cervical cancer
- Vulvar cancer
- Vaginal cancer

“HPV and Cancer”; American Cancer Society

<https://www.cancer.org/cancer/cancer-causes/infectious-agents/hpv/hpv-and-cancer-info.html>



FORESKIN COMPLICATIONS

Balanitis



Balanitis



Balanitis



BALANITIS

It affects over 10% of uncircumcised boys (Escala & Rickwood, 1989; Rickwood, 1999) and recurrent balanitis occurs in about 1% of boys (Lisboa, 2009; Shenot, 2014; Malone & Stenbrecher, 2007). It affects about 25% with phimosis vs 6% without phimosis under age 5 and 24% with phimosis vs. 12% without phimosis over age 5 (Ledenhaug, 2013). It is the most common infection affecting adult men attending STD or genitourinary clinics. It affects 11% of STD clinics' uncircumcised patients (Parker, 1983; Lisboa, 2009; Shenot, 2015; Malone & Steinbrecher, 2007); and it affects up to 20% (Kinghorn, 1982) of uncircumcised men outside of STD clinics. However, it affects up to 58% of uncircumcised men with a history of nonspecific urethritis (Romero, 2013). Balanitis affects about 35% of diabetic men (Fakjian, 1990; Kohn, Pflieger-Bruss, & Schill, 1999; Romero, 2013; Verma & Wollina, 2011).

Balanitis is swelling of the foreskin or head of the penis.

Symptoms

- tightened foreskin
- discharge
- itchy genitals
- pain in the genital area
- painful skin on the penis
- painful urination.

Complications

- scarring of the meatus
- painful foreskin retraction
- inadequate blood supply
- allergic dermatitis – involves extreme itching, rash, hives, and inflamed skin, leading to scarring.
- phimosis – from chronic balanitis.

<http://www.healthline.com/health/balanitis>

FORESKIN COMPLICATIONS

Balanoposthitis



BALANOPOSTHITIS

Balanoposthitis is inflammation of the foreskin and glans of the penis. Inflammation may have any of multiple bacterial or fungal origins or be caused by contact dermatitides. Complex infections are well documented, often from a poorly retractile foreskin and poor hygiene that leads to colonization and overgrowth of fungus or bacteria. Treatment focuses on clearing the acute infection and preventing recurrent inflammation/infection through improved hygiene. Although not as necessary as in the past, circumcision may be considered for refractory or recurrent balanoposthitis.

<http://emedicine.medscape.com/article/1124734-overview>

Lichen Sclerosus



LICHEN SCLEROSUS

LS affects about 0.4% of uncircumcised boys under 18 (Sneppen & Thorup, 2016) or about 35% of uncircumcised boys with phimosis, and the incidence is rising (Celis et al, 2013). It occurs in adult men more frequently, in part due to diabetes. LS affects 35% (Kohn, Pflieger-Bruss, & Schill, 1999) to 55% (Verma & Wollina, 2011) of uncircumcised diabetic men. Type 2 diabetes affects over 10% of adults ages 20+ and more than 25% of adults ages 65+ (Pletcher, 2017).

Lichen Sclerosus is a condition that creates patchy, white skin that's thinner than normal. Lichen sclerosus can affect skin anywhere on your body. But it most often involves skin of the vulva, foreskin of the penis or skin around the anus.

<http://www.mayoclinic.org/diseases-conditions/lichen-sclerosus/basics/definition/con-20028610>

Lichen Sclerosus



FORESKIN COMPLICATIONS

Paraphimosis



PARAPHIMOSIS

It occurs in about 0.7% of children (Herzog & Alvarez, 1986), excluding iatrogenic (caused by health professionals) cases of paraphimosis. It typically affects children and the elderly (Williams, Morrison, & Richardson, 1995).

Paraphimosis is a condition in which the foreskin gets stuck behind the glans of the penis. Circulation can get cut off. Men or boys of any age need to take this seriously and see a doctor or go to the hospital immediately.

Why Paraphimosis Happens

- Mishandled foreskin. Make sure to put your foreskin back after you, or your caregiver, washes it or inserts a catheter.
- Piercings. Pain and swelling from penis piercings can make it difficult to put the foreskin in place after pulling it back.
- During sex. You might pull your foreskin back to have sex. If it stays there too long, it might swell so much that the foreskin gets trapped behind the head.
- Other penis conditions. Other ailments of the penis can lead to foreskin problems. For example, phimosis can lead to paraphimosis.

<http://www.webmd.com/men/phimosis-paraphimosis#1>

Paraphimosis



Paraphimosis



FORESKIN COMPLICATIONS

Penile Cancer



Penile Cancer



Penile Cancer



PENILE CANCER

The lifetime risk is 1 per 600-900 uncircumcised men (Kochen & McCurdy, 1980) versus 1 per 50,000-12,000,000 men circumcised in infancy (Wiswell, 1995; Wiswell, 1997). The distinction between all circumcised men and men circumcised in infancy is important because **phimosis and lichen sclerosus** are thought to be contributing factors to the development of penile cancer.

The American Cancer Society estimates for penile cancer in the United States for 2017:

- About 2,120 new cases of penile cancer
- About 360 deaths from penile cancer

<https://www.cancer.org/cancer/penile-cancer/about/key-statistics.html>

What are the risk factors?

Not being circumcised: Men who were circumcised as children have a lower chance of getting penile cancer than those who were not, but the same protective effect is not seen if the foreskin is removed as an adult. Some studies even suggested a higher risk of penile cancer in men who were circumcised as adults.

The reason for the lower risk in circumcised men is not entirely clear, but it may be related to other known risk factors. For example, men who are circumcised can't develop the condition called **phimosis**, and don't accumulate **smegma**. **Men with smegma or phimosis have an increased risk of penile cancer.** The later a man is circumcised, the more likely it is that one of these conditions will occur first. Also, **circumcised men are less likely to get and stay infected with HPV**, even after accounting for differences in sexual behavior. The later a man is circumcised, the more likely it is that he will be infected with HPV before the procedure.

<https://www.cancer.org/cancer/penile-cancer/causes-risks-prevention/risk-factors.html>

FORESKIN COMPLICATIONS

Nectrotizing Balanoposthitis



NECTROTIZING BALANOPOSTHITIS **Exceptionally rare**

Necrotizing balanoposthitis is inflammation of the glans penis and foreskin. A wide variety of infectious causes and predisposing factors have been described, and the condition is more common among uncircumcised men, possibly as a result of poorer hygiene, limited retraction of the foreskin, or due to irritation by smegma.

Penile Lymphedema



PENILE LYMPHEDEMA **Exceptionally rare**

A handful of boys, mostly older, develop penile lymphoedema, sometimes affecting the skin of the entire penile shaft, sometimes only the distal extremity, and always the prepuce. A dorsal slit may be necessary in some boys experiencing urinary difficulty in the acute phase, otherwise treatment, best deferred for several months until the chronic phase is well-established, is by excision of the underlying oedematous tissues along with the redundant shaft skin, including the foreskin.

A.M.K. Rickwood; Medical indications for circumcision; BJU International; 1999 Volume 1, p 49

FORESKIN COMPLICATIONS

Fourniers Gangrene of the Penis



FOURNIERS GANGRENE OF THE PENIS **Exceptionally rare**

Fourniers Gangrene is a life threatening disease of the perineum and genitalia in which a bacterial infection results in small vessel occlusion, gangrene of the overlying skin, and expansion of the necrotizing infection along fascial planes through bacterial enzymatic degradation... It is rarely seen in children, and most reported pediatric cases have involved children younger than 3 months.

In this case the patient's mother explained that he had been diagnosed with phimosis when he was two years old, and the parents were told that he needed circumcision and would be placed on a list for a visiting surgical team. However, the patient's family was never contacted and never returned to the hospital; the patient's increasingly stenotic foreskin led to complete urethral obstruction and gangrenous infection, ten years after his initial diagnosis of phimosis.

Luther Ward et al, *Fournier's gangrene of the penis in a 12-year-old patient secondary to phimosis*; Rhode Island Medical Journal, December 2016, pp 4