

What is Hypospadias?

Hypospadias is an variation in the development of the penis that shows in three separate ways:-

- The tube (urethra) that carries the urine from the bladder along the penis is not developed properly. This means that the hole through which the urine passes is not at the tip of the penis but can be anywhere from close to the tip of the penis, right down to the middle of the scrotum, as shown in the figure below.
- The foreskin does not properly surround the head of the penis, but is all around the back.
- The penis may be bent downwards; particularly when stiff (*this is called chordee*).

The Penis

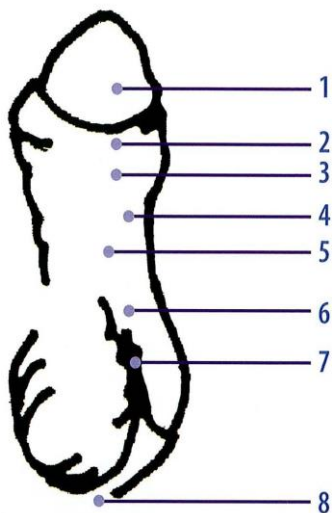


Figure 1

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|------------------|--------------------|
| 1. Glanular | 5. Proximal Penile |
| 2. Coronal | 6. Penoscrotal |
| 3. Distal Penile | 7. Scrotal |
| 4. Midshaft | 8. Perineal |

How common is hypospadias?

Around 1 in 300 boys in Scotland are born with some degree of hypospadias.

How is hypospadias caused?

The penis develops under the influence of certain hormones and genes. Hypospadias may occur when there is disruption of this process. Depending on the severity of the hypospadias, boys may have hormone and genetic tests. They may be referred to Paediatric Endocrinology or Clinical Genetics to discuss these tests and results. In some boys the hypospadias is the result of a variation in a gene or chromosome (the rod-like structures within our cells that are the packages for our genes).

In most cases the cause is unknown.

Most of the boys are completely normal apart from the hypospadias. Some children have hypospadias together with a number of other problems.

The chance of a brother having hypospadias if one child is affected is small (around 7%) but may be increased if a genetic cause has been found in the affected individual, if there is a family history of hypospadias or if parents are related.

What is chordee?

This is a bending of the penis, particularly when erect. Tight bands of tissue running along the underside of the penis cause it. These bands cannot stretch, so the bend becomes more obvious during an erection.

How can hypospadias be treated?

This depends on the severity of the hypospadias. Mild forms do not necessarily need any treatment but we can offer surgery to make things look better. Your son will need surgery if he has problems standing to pass urine, or if there is spraying of the urinary stream. Also if the penis is bent, there may be problems with sexual activity in the future, unless surgery is carried out.

Is there a right time for surgery?

We usually offer surgery before the child starts school, because we think this is best for your child socially. Also the surgery can be more complicated if left until adulthood.

What is the operation to correct the hypospadias?

There are many operations available. Your surgeon will explain which is best for your child and discuss all the options with you. Most hypospadias can be repaired by one operation with a short hospital stay. Occasionally, however, two operations may be required to give the best result. In the first stage, the penis is straightened by removing the chordee and a piece of skin (skin graft) is taken from the foreskin and placed on the penis. In the second stage (about 6 months later) the opening is moved to the end of the penis and the tip of the penis (glands) is repaired. All operations require a general anaesthetic; many children have a local anaesthetic and medicines to help the pain afterwards.

Will my son be circumcised?

Not necessarily. In some operations the foreskin will be used for a skin graft and to cover the underside of the penis. In a single stage operation it is often possible to recreate the foreskin.

What happens after the operation?

What usually happens is your son will have a tube (catheter) to drain the urine for a few days until the wounds have healed. The stitches are usually dissolvable so do not need to be removed. The catheter is kept in for between 7-12 days, but your child will be able to go home 24-48 hours after surgery with the catheter in, if you and your doctor are happy. The catheter and dressing – if used – will be removed on the ward at the appropriate time. Your surgeon will then arrange to see you back at the outpatient clinic to assess the outcome of your son's surgery.

What are the risks of hypospadias repair?

All surgery carries a small risk of bleeding during or after the operation and an anaesthetic for any operation carries a very small risk of complications. Specific risks include:

- **Fistula** – this is a second small hole from which your son will pass urine. If this happens another operation is necessary.
- **Stenosis** – this is when the new hole tightens down and becomes too narrow. If this happens another operation is needed.
- **Bladder “spasm”** – the drainage tube may irritate the bladder and cause pain. A medicine called *Oxybutynin* can help prevent this.
- **Infection** – this is rare in hypospadias surgery, but can occur.

What are the long term results of hypospadias?

- Following his surgery, the appearance of your son’s penis will be fairly close to normal, although he may have required a circumcision.
- If the hypospadias was severe, his penis may be a bit small but will grow well at puberty.
- Your son should be able to pass urine standing up like any other boy.
- Hypospadias does not affect his ability to control his urine.
- He should have a straight erection.
- Hypospadias does not affect his chances of being a father.
- His son may have a slightly higher risk of having a hypospadias.

Information gathering

With parental permission, all the children’s hospitals in Scotland collect details on children with hypospadias as part of a national audit.

Your child cannot be identified by anyone from this information and it will be fully discussed with you before we do this.

What is SDSD?

SDSD is the Scottish Differences of Sex Development Network. It comprises health care professionals in Scotland who have a particular interest in the care of children and young adults where there may be concerns about the development of their sex organs (genitalia). SDSD is approved and supported by the NHS Scotland as a managed clinical network. More details about SDSD are available through the Network Office or at www.sdsd.scot.nhs.uk. We can also help families get in touch with other similarly affected families.

Who has reviewed SDSD activity?

NHS Quality Improvement Scotland (QIS)
National Services Division, NHS Scotland (NSD)
Director of Health Information & Technology,
GGCHB

This information sheet was originally created in March 2005 by members of the Scottish Differences of Sex Development Network.

www.sdsd.scot.nhs.uk

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This leaflet will be available in other languages (eg Punjabi, Urdu, Polish) or formats (eg larger print) on request from the SDSD office or visit the website www.sdsd.scot.nhs.uk



Scottish Differences of Sex Development

Managed Clinical Network

INFORMATION LEAFLET

Hypospadias for Parents

