

HYPOSPADIAS

Hypospadias is a birth defect (congenital condition) in which the opening of the urethra (tube through which urine drains outside from the bladder) is on the underside of the penis instead of at the tip.

What are the types of hypospadias?

There are mainly 3 types of hypospadias.

- a. Distal penile : opening is closer to the tip of the penis. Seen in ~50% patients. If the opening is at the junction of the glans and the skin it is coronal hypospadias.
- b. Mid-penile hypospadias : opening seen anywhere in the middle of the shaft of the penis. Seen in ~30% patients.
- c. Proximal penile hypospadias – opening is seen near to the root of the penis. Seen in ~20% patients.

How common is Hypospadias?

Hypospadias is a very common congenital anomaly in boys. The incidence is reported to be around **1%** (1 in 100 boys).

What causes Hypospadias?

Although the cause of hypospadias is usually unknown, these factors may be associated with the condition:

- **Family history:** This condition is more common in infants with a family history of hypospadias.
- **Genetics:** Certain gene variations may play a role in disruption of the hormones that stimulate formation of the male genitals.

- **Maternal age over 35:** Some research suggests that there may be an increased risk of hypospadias in infant males born to women older than 35 years.
- **Exposure to certain substances during pregnancy.**

How does hypospadias present?

Children usually present in following ways-

- Opening of the urethra at a location other than the tip of the penis
- Downward curve of the penis (chordee)
- Hooded appearance of the penis because only the top half of the penis is covered by foreskin
- Abnormal spraying during urination

What is the treatment of Hypospadias ?

Hypospadias is a **correctable defect**. **Surgery** (Urethroplasty) usually restores the normal appearance of the penis. With successful treatment of hypospadias, most males can have normal urination and reproduction.

What is the ideal time of surgery ?

Most infants with hypospadias are diagnosed soon after birth while still in the hospital. However, slight displacement of the urethral opening may be subtle and more difficult to identify. One should contact a pediatric surgeon if there are any concerns about the appearance of the child's penis or if there are problems with urination (improper stream or spraying of urine).

Hypospadias repair (Urethroplasty) is done most often when boys are between 6 months and 2 years old (before going to playschool). Boys who are born with hypospadias should not be circumcised at birth. The foreskin will be needed to repair the hypospadias during surgery.

How to investigate a child with Hypospadias ?

No major blood investigations are required to go ahead with the surgery. Children with proximal penile hypospadias require ultrasonography for any kidney abnormality and endocrinological workup (for cases associated with undescended testis).

What surgery is done for Hypospadias ?

Surgery for hypospadias is Urethroplasty. There are different types of urethroplasty done for various degrees of hypospadias. The surgery is done in a **single operation or staged repair**. Mild defects may be repaired in one procedure whereas defects associated with severe chordee (downward bending of the penis) and proximal hypospadias may need two procedures (staged repair).

What can happen if hypospadias is not corrected?

If hypospadias is not treated, it can result in:

- Abnormal appearance of the penis
- Problems learning to use a toilet
- Abnormal curvature of the penis with erection
- Problems with impaired ejaculation
- Psychological impact in the child.

To conclude, Hypospadias is a common but a major problem in boys. It needs surgical correction. One should consult a pediatric surgeon regarding the timing and the type of surgery needed for the same.