



Indian Association of Pediatric Surgeons

Patient Information Sheet

HYPOSPADIAS



Subcoronal

Midshaft

Penoscrotal

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What is hypospadias?

Hypospadias refers to a urethral meatus ("pee-hole") which is located along the underside, rather than at the tip of the penis. The urethral meatus can be located from just below the tip (glanular-coronal) to below the scrotum (perineal). The position of the meatus on the shaft of the penis can be called distal-penile, mid-penile or proximal-penile.

Alongwith the abnormal location of the meatus, the penis is also curved to varying degrees and this curvature is referred to as chordee. The foreskin (prepuce) is also incomplete.

What causes this problem and how common is it ?

Hypospadias is a congenital malformation. In the majority of boys no specific cause can be pin-pointed but associated factors include hormonal, environmental and genetic causes. Sometimes it can run in families.

Hypospadias, especially with undescended testis and a perineal meatus, can be mistaken for or may also be part of disorders of sexual differentiation.

The reported incidence varies from as low as <1 to approx. 60 per 10,000 births, making it one of the most common congenital malformations in males.

What are the symptoms ?

Passage of urine from the abnormal opening is the universal symptom. The stream of urine is directed at the feet.

The curvature of the penis is usually obvious and looks worse during erection.

When to see your doctor ?

The abnormal urethral opening is usually seen at birth and although there is no emergency in the initiation of treatment medical opinion should be sought to rule out associated problems etc.

How it is diagnosed ?

Hypospadias is diagnosed by clinical examination only.

However, some blood and/or urine tests maybe needed to rule out hormonal related problems which maybe associated. Chromosomal analysis maybe needed if genetic disorders are suspected. Radiological imaging may sometimes be required to evaluate the internal organs and the presence of vaginal remnants.

What are the treatments available ?

Surgery is the only modality available to treat this condition. Most surgical procedures would use the foreskin tissues for the surgical repair. Hence, religious/social groups who practice circumcision as a ritual at birth should be cautioned against it in children with hypospadias.

When it should be operated ?

The surgery for hypospadias should be done after around 9 months of age, depending upon size of the penis. It should certainly be completed before the child starts going to school.

Are there other alternative methods of treatment ?

Medical management is not successful in this condition. However, it may be used as an adjunct especially if the penis is short and the quality of tissues to be used for repair is not good. In such situations topical application of testosterone cream can help in improving these tissues.

What does the operation involve ?

The surgical repair of hypospadias can be done as a single stage procedure or it can be done in stages.

In general the more distal the hypospadias is the chordee is also less and the repair is successful in one stage. The surgeon uses the skin on the penis or prepuce to create a tube so that urethral opening can be made at the tip of the penis.

Single stage procedures are also available for the more proximal varieties of hypospadias. However, these are complicated surgeries and should be done by experienced surgeons. Many surgeons would prefer staged surgery.

Surgery for hypospadias requires a few essential parts:

- The penis needs to be straightened – chordee correction.
- The urethral meatus needs to be brought up to the tip of the penis by fashioning a tube from locally available skin, most commonly the foreskin – urethroplasty.
- The tube thus created is then reinforced with available nearby tissues to minimise the chances of a leak – ‘water proofing’.
- Skin cover is also very challenging; most surgeons would borrow the foreskin for this purpose (hence the advice to avoid prior circumcision).

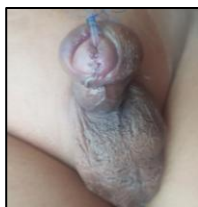
What are the possible complications / what happens after the operation ?

Most surgeons will place a catheter across the urethroplasty for 7-10 days and keep a dressing for variable periods of time.

Fistula, necrosis of skin, wound dehiscence etc are known complications. Some fistulas may need a formal closure by a surgical procedure.

What is the outlook or future of these children ?

They need to be followed up in long term to check for penile growth and sexual functions.



Hypospadias

After urethroplasty

Catheter placed in between two diapers

After removal of dressing