



HYPOSPADIAS

Hypospadias is a congenital defect of the penis in which there is incomplete fusion of the urethral fold to form the urethra. This results in an abnormal location of the urethral opening (meatus), which may be found anywhere on the ventral side of the penis from the glans, to the scrotum, or in severe cases on the perineum. In addition to the abnormal location of the meatus, there may be incomplete development of the foreskin, or ventral curvature of the erect penis, termed chordee.

Mild cases of hypospadias do not require surgical repair. However, surgical repair is advisable if the urethral opening is in a position which will require the boy to sit down to void, a devastating psychological problem. Repair of the chordee is also essential to allow satisfactory sexual function in adulthood. In severe cases surgical repair must be carried out to ensure fertility. Circumcision is contraindicated in this condition, as the foreskin is used for the surgical repair.

While most cases of hypospadias are sporadic, there is definite familial tendency, with 80% of patients having had fathers with the condition, and 12% of patients having had siblings with the condition. Hypospadias is most commonly seen in Italians and Jews. This condition is also seen in various rare syndromes or as part of an intersex condition.

Other abnormalities associated with hypospadias include; undescended testis, inguinal hernias, enlargement of the utricle, micropenis, and meatal stenosis

It may be difficult to see the abnormal meatal opening unless the child is urinating. Often there is a blind dimple on the glans, leading families to believe that their child has two meatal openings.

The skin of the penis is severely altered in hypospadias. The foreskin shows a characteristic hooded appearance. Distal to the meatus, the skin shows a V-shaped defect termed the urethral delta. The frenulum is always absent. Lateral to the penis, two raphes extend obliquely from the edge of the urethral delta to end in “dog ears” on the dorsum of the penis.

By slight perineal pressure on the corpus cavernosa, you can obstruct venous outflow and thus mimic an erection. This should help you in assessing the degree, (mild, moderate, severe) and location (glandular, distal shaft, midshaft, or proximal shaft) of the chordee.

Hypospadias is derived from the Greek, hypo meaning “under”. And spadon meaning “fissure”. Hypospadias is one of the most common pediatric genital abnormalities seen, with incidence ranging from 3.2 to 8.2 per 1000 live births.