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Hypospadias and Associated Genital Anomalies

Definition: A developmental anomaly in the male where the urethra opens on the underside of the penis or in severe cases in the scrotum or perineum (area between scrotum and rectum).

Anatomy:

Hypospadias: The urethra normally opens on the glans at the tip of the penis in males. In patients with this anomaly, the opening can range from just below the tip on the glans to the perineum, which is the area between the scrotum and the anus. With severe hypospadias other associated genitor-urinary anomalies will be more likely and screening will be recommended. Almost all except the most distal hypospadiac will have a dorsal hood, incomplete foreskin.

Chordee: A deflection or curve of the body of the penis most accentuated during an erection. Chordee can range from very minor to severe, making intercourse very painful or impossible.

Scrotal anomalies: If the urethral meatus opening is located on the scrotum or perineum, the scrotum will not be fully formed and will appear as a shawl, or may be transposed above the penis. Occasionally a web will be found between the penis and scrotum.

Problems:

- Psychological – feelings of inadequacy
- Instability to directly control urination
- Spraying when urinating
- Painful erections
- Inability to have intercourse

Surgery: At present, surgery offers the only treatment. However, all hypospadias do not necessarily need correction. The most distal, closed to the normal urethral opening, not associated with other problems may be left alone. If the urethra opens in the lower part of the glans or if other anomalies are present, surgical correction is recommended. Most repairs use the patient's extra skin or foreskin to create a urethra to bridge the gap and repair the other anomalies as well. For severe hypospadias, more than one procedure is occasionally required. Surgery is best performed between six and twelve months of age. Most children go home the day of surgery. Many different procedures have been devised, however the required expertise and special training. Generally only pediatric urologists are trained to perform them.

Surgical Complications: Even in the best hands some complications may arise. In the most distal repairs (smallest areas to the bridge) about 5 percent of cases may need further correction. In the scrotal and perineal repairs, the complication rate may be 15 to 20 percent. The two most common complications are:

1. Fistulas- a communication between the new urethra and skin, a small opening before the tip
2. Strictures- a narrowing of the new urethra

Follow-up: Most patients have a bulky dressing and a stent (catheter or tube). The dressing is removed in the office two to five days after the procedure. The stent is generally removed ten days after the procedure. It is important to keep the area as dry as possible, especially during the first few days. Patients are usually re-examined three to four weeks after surgery and then periodically until the repair has been judged to have completely healed.