

Hypospadias vs. Epispadias

Two congenital urethral defects commonly tested on the NGN NCLEX. Master the anatomy, the surgical management, and — most importantly — the pre-op teaching that keeps these infants safe and surgery-ready.

HYPOSPADIAS = VENTRAL (UNDER)

EPISPADIAS = DORSAL (OVER)

⚠ DO NOT CIRCUMCISE

SURGERY: 6-18 MONTHS



Remember it this way → **H**ypospadias = **H**idden underneath (urethra opens on the **underside / ventral**). **E**pispadias = **E**xposed on top (urethra opens on the **upper side / dorsal**).

MORE COMMON · 1 IN 200 MALES

Hypospadias

From Greek: **hypo-** (below) + **spadon** (opening). Urethral meatus opens on the **ventral (under)** surface of the penis.

DORSAL (TOP)

chordee (ventral curve)

normal position

urethral meatus

VENTRAL (UNDERSIDE) ← OPENING HERE

MEATUS ON VENTRAL SURFACE · OFTEN WITH CHORDEE

RARE · 1 IN 117,000 MALES

Epispadias

From Greek: **epi-** (upon/above) + **spadon** (opening). Urethral meatus opens on the **dorsal (upper)** surface of the penis.

DORSAL (TOP) ← OPENING HERE
urethral meatus

normal position

dorsal curvature

VENTRAL (UNDERSIDE)

MEATUS ON DORSAL SURFACE · OFTEN WITH BLADDER EXSTROPHY

What it is: Congenital defect where the urethral meatus opens on the **underside** of the penis — anywhere from just below the glans to the scrotum/perineum.

INCIDENCE

~1 in 200–250 live male births

ASSOCIATED WITH

Chordee · undescended testes · inguinal hernia

— **Key Assessment Findings**

- ◆ **Abnormal urinary stream** — downward or splayed spray; boy may need to sit to void
- ◆ **Chordee** — ventral curvature of the penis (especially with erection)
- ◆ **Dorsal hooded foreskin** — incomplete prepuce on the underside
- ◆ **Meatus location** — glanular, coronal, penile shaft, scrotal, or perineal

What it is: Rare congenital defect where the urethral meatus opens on the **upper (dorsal)** surface of the penis. Often part of the **bladder exstrophy–epispadias complex (BEEC)**.

INCIDENCE

**~1 in 117,000 males
~1 in 484,000 females**

ASSOCIATED WITH

Bladder exstrophy · incontinence · pubic diastasis

— **Key Assessment Findings**

- ◆ **Meatus on dorsal surface** — from glans to penopubic area (males)
- ◆ **Urinary incontinence** — common due to sphincter involvement
- ◆ **Bifid clitoris** in females · wide/split labia
- ◆ **Shortened, broad, upward-curved penis** (dorsal chordee)
- ◆ **Widely separated pubic bones** (diastasis) — waddling gait possible

1 Surgical & Medical Management

Timing, goals, and priority nursing care across the peri-operative continuum.

PRE Pre-Operative Care

- ✓ ⚠ **DO NOT circumcise** — foreskin is needed to reconstruct the urethra
- ✓ **Surgery timing:** typically **6–18 months** of age (before toilet training & body-image development)
- ✓ **Goals of repair:** straighten penis, reposition meatus to tip, preserve function & cosmesis
- ✓ Assess for associated anomalies (UDT, hernia, renal)
- ✓ NPO per protocol; verify informed consent with parents

POST Post-Op Nursing Priorities

- ✓ **Protect the stent/catheter** — it is the #1 priority. Never clamp, kink, or remove
- ✓ **Double diapering** — inner diaper for stool, outer for urine & stent protection
- ✓ **Monitor urine output & color** — expect pink-tinged initially; report bright red, clots, or no output
- ✓ **Pain & bladder spasm management** — oxybutynin often ordered for spasms
- ✓ **Prevent infection** — antibiotics as ordered; sterile dressing care

TEAC Parent & Family Teaching

- ✓ **This is not your fault** — congenital, occurs during fetal development
- ✓ **No circumcision** until surgeon evaluates — foreskin used for repair
- ✓ **Expect multiple stages** possible (especially for severe hypospadias/epispadias)
- ✓ Teach **catheter/stent care**, signs of infection (fever, foul drainage, ↓ output)
- ✓ **Push PO fluids** post-op to flush urinary system

✓ Address parental anxiety/guilt — reassure defect is **not their fault**

✓ **Avoid straddle toys, tub baths, rough play** until cleared (usually ~2 weeks)

✓ Keep child's hands away — **use arm restraints (no-no's) only as ordered**

✓ Give **sponge baths only** until stent removed & site healed

✓ Long-term: monitor for UTI, **strictures, fistula**; may need follow-up surgery

✓ Promote normal body image; reassure most boys have **normal adult function & fertility**

NGN ALERT

Notify the Provider Immediately If...

- ▶ **No urine output** from stent/catheter for more than 1 hour
- ▶ **Bright red bleeding** or blood clots in drainage
- ▶ **Fever > 38.5 °C (101.3 °F)**, foul-smelling drainage, or redness/swelling at the site
- ▶ **Dislodged or pulled-out stent** — never reinsert; cover site and call surgeon
- ▶ **Severe bladder spasms** unrelieved by ordered antispasmodics
- ▶ **Abdominal distension / inability to void** after stent removal

Mnemonic

S T E N T

- S** Secure it — never pull, clamp, or kink
- T** Two diapers — double-diaper technique
- E** Evaluate output — color, amount, patency
- N** No tub baths, straddle toys, or rough play
- T** Teach parents — signs of infection & when to call