

# HOSPITAL PHYSICIAN®

## UROLOGY BOARD REVIEW MANUAL

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## Hypospadias

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Cover Illustration by Jean Gardner

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#### I. INTRODUCTION

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- A. **Definition of hypospadias.** In male infants born with hypospadias, the urethral opening is mislocated on the ventral penile shaft proximal to the glans tip.
- B. **Treatment.** Management of hypospadias involves surgical repair. Hormones may be given on a supplementary basis. Objectives of repair include:
1. Completely relieving chordee, permitting a straight erection (orthoplasty)
  2. Repositioning the meatus to the tip of the glans
  3. Forming a uniform caliber urethra free of fistulas, strictures, or hair
  4. Creating a symmetric glans and penile shaft
  5. Allowing the patient to have a solid, straight urinary stream

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#### II. PENILE ANATOMY

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- A. **Review of normal anatomy**
1. External anatomy
    - a. The glans is typically conical in shape with the meatus located at its distal tip.
    - b. The penile shaft is cylindrical with highly elastic skin that is devoid of hair or glandular elements with the exception of the smegma-producing glands at the coronal base.
  2. Penile cross-sectional anatomy is shown in **Figure 1**.
- B. **Abnormal anatomic features of patients with hypospadias**
1. The meatus is dystopic.
  2. The investing layers of the urethra proximal to the meatal opening may exhibit a spectrum of deficiencies.