

Male Genitalia Exam

Indications

- Routine physical exam
- Testicular/penile complications (e.g. pain, swelling, etc.)

Anatomy:

- Accessory ducts:
 - Ductus deferens (vas deferens):
 - Runs upward as part of the spermatic cord from the epididymis through the inguinal canal into the pelvic cavity (feels like a hard wire upon palpation)
 - Transports sperm from the epididymis to the urethra
 - Ejaculatory duct:
 - Formed by the joining of the ampulla of the ductus deferens and the seminal vesicle
 - Traverses the prostate and empties into the urethra
 - Epididymis:
 - Soft, comma shaped structure located on the posterolateral surface of each testis
 - Consists of the tightly coiled ducts
 - Provides a reservoir for storage, maturation, and transport of sperm
- Leydig cells:
 - Interstitial cells that produce androgens (e.g. testosterone)
- Penis:
 - Glans: cone-shaped tip of the penis
 - Prepuce (foreskin): fold of skin covering the glans in uncircumcised men
 - Shaft
 - Formed by the corpus cavernosa and corpus spongiosum (vascular erectile tissue)
 - Urethra
 - Located ventrally in the shaft of the penis
 - Terminal portion of the male duct system
 - Urethral meatus: vertical, slit like opening
- Scrotum:
 - Sac of skin and superficial fascia that hangs outside the abdominopelvic cavity at the root of the penis
 - Divided by a midline septum to form two compartments for the testes
- Seminiferous tubules:
 - Contained in the lobes of the testes
 - Produce sperm
- Testes (male gonads):
 - Located within the scrotum
 - Approximately 4 cm long and 2.5 cm wide
 - Contain sperm and hormone producing cells

Technique (penis):

Inspection

1. Inspect the skin, prepuce (if present), and glans

2. Retract the foreskin (or ask the patient to retract it)
 - a. The presence of smegma, secretions of the glans, is normal
 - b. Do not retract the foreskin if it is painful/tight
 - c. Replace the foreskin
3. Note any ulcerations, scars, nodules, or signs of inflammation
4. Check the skin around the base of the penis for excoriations or inflammation, also look for nits/lice in the pubic hair
5. Observe the location of the urethral meatus
6. Compress the glans gently between your index finger and thumb to open the urethral meatus and inspect for discharge
7. If the patient reports a history of discharge, gently milk the shaft of the penis from the base to the glans (you may ask the patient to do this)
 - a. Have a glass slide/culture material ready

Palpation

1. Palpate the shaft of the penis between your thumb and first two fingers
2. Note any tenderness, induration, or other abnormalities

Technique (scrotum and contents):

Inspection

1. The patient should be standing facing the examiner
2. Inspect the skin of the scrotum and note the position of the testes
 - a. Lift the scrotum to visualize the posterior surface
 - b. One side often hangs lower than the other
3. Note any swelling, lumps, rashes, or loss of rugae

Palpation

1. The testicles are extremely sensitive and should be handled gently
2. Warm your hands before palpating
 - a. A common cause of an undescended testicle is an examiners cold hands
3. Using your thumb and first two fingers, palpate each testis, epididymis, spermatic cord, and external ring
4. The testis has the consistency of a hard-boiled egg or rubber ball
5. The epididymis is located on the superior posterior surface of the testicle and is soft and wormlike
 - a. Do not confuse with an abnormal lump
6. Note size, shape, consistency, tenderness, presence of nodules, dilated veins, thickening, or other abnormalities
7. Palpate each spermatic cord (including the vas deferens) from the epididymis to the superficial inguinal ring
8. Note any nodules or swellings

Testicular Self-Exam

1. May be easiest to perform exam after a warm shower/bath since heat relaxes the scrotum which makes it easier to examine
2. Standing in front of a mirror, check for any swelling of the scrotal skin
3. Examine each testicle separately
4. Cup the testicle between your thumb and fingers with both hands and roll it gently between the fingers
 - a. Note: one testicle may be larger than the other which is normal

5. Find the soft, tube-like structure at the back of the testicle (the epididymis)
6. Report to your doctor immediately if you find any abnormalities (e.g. lumps, painful areas, skin changes, or swelling)

Recording the Findings

- Circumcised/uncircumcised male (prepuce easily retracts). No penile discharge or lesions. No scrotal swelling or discoloration. Testes descended bilaterally, smooth, no masses. Epididymis nontender. No inguinal or femoral hernias.

References

1. Bickley LS et al. Bates' Guide to Physical Examination and History Taking. 11th ed. Philadelphia, PA: Lippincott Williams & Wilkins. 2013;519-520, 527-529.
2. Marieb EN, Hoehn K. Anatomy & Physiology. 3rd ed. San Francisco, CA: Pearson Benjamin Cummings. 2008;932-935.
3. Orient, JM. Sapira's Art and Science of Bedside Diagnosis. 4th ed. Philadelphia, PA: Lippincott Williams & Wilkins. 2010;440-447.