Functional Medicine University’s
Functional Diagnostic Medicine
Training Program

Module 1 * Lesson 6

Physical Exam & Associated Pathology
Part IX – Male Genitalia, Hernias & Rectum

By Wayne L. Sodano, D.C., D.A.B.C.I., & Ron Grisanti, D.C., D.A.B.C.O., M.S.

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Male Genitalia and Hernias

• The **inguinal canal** is parallel and above the inguinal ligament. The canal, which is approximately 4 cm long in adults, allows structures to pass from the abdomen to the testes. (In the female, it permits the passage of the round ligament of the uterus to the labia majora). Just lateral to the pubic tubercle is the **external inguinal ring**, which is palpable. The internal ring and canal are not palpable. **Inguinal hernias** are the result when bowels protrude through weak areas.

• The **femoral canal**, which lies below the inguinal ligament, is another area of weakness for developing a herniated mass. The femoral canal is located just medial to the **femoral vein**.

<table>
<thead>
<tr>
<th>Inguinal Hernia</th>
<th>Femoral Hernia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indirect</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Frequency, Age, &amp; Sex</strong></td>
<td><strong>Point of Origin</strong></td>
</tr>
<tr>
<td>Most common, all ages, both sexes. Often in children; may be in adults</td>
<td>Above inguinal ligament, near its midpoint (the internal inguinal ring)</td>
</tr>
<tr>
<td>Less common, usually in men &gt;40 Rare in women</td>
<td>Above inguinal ligament, close to the pubic tubercle (near the external inguinal ring)</td>
</tr>
<tr>
<td>Least common. More common in women than men.</td>
<td></td>
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</tbody>
</table>

**Signs and symptoms**

- Sexual response
- Penile discharge or lesions
- Scrotal pain, swelling or lesions
Signs and Symptoms (con’t)

• Penile discharge or lesions
  o Discharges from the penis related to sexually transmitted diseases (STDs) are presented as dripping or staining of underwear. The amount of discharge, its color and consistency, along with any fever, chills or rash should be considered an STD and confirmed. A yellow discharge usually indicates a gonococcal infection, while a clear or white discharge usually indicates a nongonococcal urethritis.

• Scrotal pain, swelling, or lesions
  o Scrotal pain can indicate infection of the contents, testicular torsion, hernia, and epididymitis.

• The Penis
  o Inspection
    ▪ The skin
    ▪ The prepuce (foreskin)
    ▪ Glans
      – Exam the skin for inflammation, lesion, or infestations (lice, scabies). Retraction of the foreskin is essential in examination.

• The Scrotum and Its Contents
  o Inspection
    ▪ The skin
      – Lift the scrotum so that the posterior surface is visible. Examine for any rashes, epidermoid cysts, or skin cancer
      – Note any swelling, lumps or veins. A poorly developed scrotum on one or both sides suggests cryptorchidism (an undescended testicle). Common scrotal swellings include indirect inguinal hernias, hydroceles, and scrotal edema.

• Palpation of the penis and scrotum
  o Palpate the penis between the thumb and first two fingers, noting any abnormalities of tenderness or induration, which would suggest urethral stricture or a possible cancer.
  o Palpate the scrotum between the thumb and first two fingers, noting any pain or swelling. Tenderness or pain indicates acute epididymitis, torsion or hernia. Any painless nodule may indicate testicular cancer, especially in the young adult.
• Palpation of the penis and scrotum (con’t)
  o Palpate each spermatic cord, including the vas deferens, between your thumb and fingers, from the epididymis to the superficial inguinal ring.
    ▪ Multiple tortuous veins in this area may be palpable and visible, which indicate a varicocele.
    ▪ If the vas deferens is infected, it may feel thickened. A hydrocele of the cord is suspected if a cystic structure is present.
  o Patients should be encouraged to perform self-examination on a regular basis.

• Palpation of the Rectum and Associated Structures
  o The prostate
    ▪ The prostate has three lobes, two of which are palpable through the rectum. Between the lobes is a shallow groove that is also palpable. The size of the prostate is approximately 2.5 cm long.
  o The uterine cervix
    ▪ The uterine cervix usually is palpable through the anterior wall of the rectum.
  o The valves of Houston, contained within three inward foldings of the rectum, may sometimes be felt.

• Signs and symptoms
  o Change in bowel habits
  o Blood in the stool
  o Pain with defecation; rectal bleeding or tenderness
  o Anal warts or fissures
  o Weak stream of urine
  o Burning with urination

  o Change in bowel habits and blood in the stool may be an early warning sign of cancer. Any change in bowel habits, including change in size of stool, should be investigated.
  o Frequency of urination may indicate diabetes and/or acute chronic infection.
  o Hesitation of urine flow or dribbling may indicate an enlarged prostate
  o Proctitis includes anal itching, anorectal pain, tenesmus, discharge or bleeding from infection, or rectal abscess.
    – Causes include intestinal parasites, diet, bacterial and viral infections, anal intercourse.
• Examination
  o Please visit www.functionalmedicineuniversity.com – On Line Library – On Line Video Tutorials

  ‘Male Urological Exam’
  (includes urogenital, rectal, & prostate exams)

• Fecal Occult Blood Testing
  o A new colorectal cancer screening test is available: Fecal Globin by Immunochemistry (InSure)
     – Offers improved clinical sensitivity and specificity that leads to a higher detection rate of bleeding due to early-stage cancers and significant adenomas
  o Benefits over traditional guaiac-based fecal occult blood tests
     – Only lower gastrointestinal bleeding from the colorectum is detected because it utilizes monoclonal antibodies specific for human globin
     – Doesn’t require any dietary or medicinal restrictions
     – Better patient home testing compliance

References Lesson 6 Parts I-IX:
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