Male Adolescent Sexual and Reproductive Health Care
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Can I ask the doctor this question?
Drug kid (short clip)
Common Questions from Adolescent Males in a Clinical Setting

- Is my penis too small?
- I would like to be circumcised.
- Is there anything you can do to make me taller?
- I have a clear discharge from my penis but have never had sex.
- Last night, I couldn’t get it up with my girlfriend. ...what’s wrong with me?
Common Questions from Adolescent Males in a Clinical Setting

- Is it wrong to masturbate every day, does that mean that I am gay?
- I’m afraid I am growing breasts, could this mean that I am one of those transsexuals?
- I want an HIV test even though I have never had sex!
- A 17 year old senior in high school tells you that he has never had a wet dream nor masturbated, is this normal?
- An 18 year old senior in high school who admits to feelings of depression asks you for a prescription for Viagra
Nocturnal Emissions

- As early as Tanner 2 (prostatic fluid)
- Unknown to many males
- Mistaken for enuresis
- Many fears and misconceptions
- Part of regular anticipatory guidance
Onanism

- In the Biblical Book of Genesis, Onan (Hebrew: אוֹנָן, Modern Onan Tiberian ⱪִנָּן; Strong) was the second son of Judah.[1] Certain interpretations of the narrative concerning him have led to the term onanism, which means masturbation or coitus interruptus.
Death of Onan

Watercolor by Franc Lanjšček
Self Manipulation

- The age of first male masturbation occurs between 12 and 14 years of age
- Myths have not changed in many years: anxiety/guilt
- 36% of males report masturbating 3-4 times per month; 10% report masturbating every other day or daily
- No medical harm
- Alternative to intercourse for some males and females
- Part of regular anticipatory guidance
Gynecomastia

- Physiologic

- Peak prevalence of 60-65% at age 14

- Tanner 3-4
Gynecomastia

- Over 75% is bilateral
- Concurrent or sequential
- Resolves in 1-2 years
  - 25% >2yrs
  - 7% >3yrs
Etiology of Physiologic Gynecomastia

- At puberty breast tissue proliferates
- Various theories - Transient imbalance
- Estrogen stimulation vs. Androgen atrophy
Underworks Men’s Gynecomastia Chest Binder
A 14 year old male arrives in your office requesting a pre-participation sports physical for baseball. He is the first string pitcher and is with his father. The sports form that he needs completed requires a physical examination to rule out hernia as well as a testicular examination.
Declining Adolescent Genital Exam
Clinical Points

- An adolescent may have real issues as to why he does not wish to remove his undergarments
  - Prior history of sexual abuse
  - Not having had a genital exam during a routine exam as a child by his Pediatrician
  - Fear of having an erection especially with a male examiner
- You can indicate on form that patient declines genital exam
  - HealthConnect Well Adolescent Smart Set under Genital Exam
    - “patient declined genital exam”
- You could offer to have a chaperone for this part of the exam or an examiner of another gender to perform the genital exam
- You should give a brochure on TSE
The Male Genital Exam

- Chaperones
- Keep Exam Room warm (relaxes the scrotum)
- Examiner warms gloved hands
Legal/Ethical Points

- Although a chaperone is not required by law, it is strongly recommended in any circumstance in which a patient might believe that he or she is being sexually harassed or exploited by the provider.

- Under such circumstances, absence of a chaperone can end up being a professional liability risk, as well as a disciplinary risk.
Use of Chaperones

The Male Genital Exam

- Glands of Littre
- Urethra
- Internal Inguinal Ring
- Inguinal Canal
- External Inguinal Ring
- Spermatic Cord
- Vas Deferens
- Tunica Vaginalis
- Epididymis
- Appendix Testis
- Testis
Examination - Genitals

Inspection

- For exam, instruct male to:
  - Change into gown or
  - To stand & lower pants to expose genitalia & inguinal area
- Inspect skin around genital area
- Inspect pubic hair for:
  - Crabs, lice, or nits
  - Tanner Stage
    (Sexual Maturity Rating)
Examination - Genitals

Palpation

- Palpate inguinal lymph nodes for swelling or tenderness

- Palpate scrotal contents:
  - Gently compress testes & epididymis between thumb and 1st 2 fingers
  - Note problems (e.g., tenderness, shape, masses, swelling or presence of nodules)
  - Tanner stage each testes
  - Identify spermatic cord with its vas deferens
  - Note tenderness or swelling
Examination - Genitals

Palpation

- Penis:
  - Inspect skin on shaft & glans for ulcers. Raised lesions, or signs or inflammation
  - Retract foreskin if present (Technique: ask patient to retract)
Palpation

- **Penis:**
  - Gently compress glans between thumb & index finger to open urethral meatus
    - If no discharge visible, strip/milk shaft of penis from base to glans
    - Inspect meatus for stenosis, lesions, urethral opening position
- Perform hernia examination
- Rectal exam (not routine unless recommended - MSM)
The Male Genital Exam

- Absence of vas deferens bilaterally is associated with Cystic Fibrosis
- Unilateral absence of vas deferens is associated with renal agenesis
Tinea Cruris
The Male Genital Exam

- Examination of the Penis
  - Penile Pearly Papules
    - Most Common in Tanner Stage II or III
    - 15% of all adolescents
Penile Pearly Papules

Seen along corona of glans penis
Penile Pearly Papules
The Male Genital Exam

- Hypospadias
- Foreskin Retraction
  - Balanitis
  - Smegma
  - Candida Infection
  - Ulcerations
    - Herpes
    - trauma

trauma
The Male Genital Exam

- Examination of the Penis
  - Phimosis
Mild inflammation can result in Phimosis.

Repeated inflammation, even tension from erections, may exacerbate any fibrosis and lead to Phimosis.

- Vitamin E cream and topical steroid ointments may help soften a phimotic ring.

- Significant Phimosis
  - Dorsal slit, Excision of Phimotic ring, circumcision.
Penile Lesion
Classic penile chancre of Primary Syphilis
Penile Chancre
Condylomata acuminata
Condylomata accuminata
Condylomata accuminata
Abstract

On October 25, 2011, the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention recommended that the quadrivalent human papillomavirus vaccine (Gardasil; Merck & Co, Inc, Whitehouse Station, NJ) be used routinely in males. The American Academy of Pediatrics has reviewed updated data provided by the Advisory Committee on Immunization Practices on vaccine efficacy, safety, and cost-effectiveness as well as programmatic considerations and supports this recommendation. This revised statement updates recommendations for human papillomavirus immunization of both males and females.
The Male Genital Exam

- The Testicular Examination
  - Teaching the adolescent male who to perform his own exam
  - Monthly
  - In shower
The Testicular Examination

- Diagram of Testicular Self Exam
- L testis lower than R
Screening for testicular cancer (TC)

- **USPFTF recommends against routine screening for testicular cancer in asymptomatic adolescent & adult males**

- **Males at risk for TC** “should be informed about risk & counseled about screening options”
  - Whites, ages 13-39, h/o cryptorchidism, orchiopexy, testicular atrophy, family h/o TC, h/o testicular trauma, HIV, Klinefelter’s

- **Recommend these males be checked regularly & perform a self-testicular exam monthly**

- **All other young adult males should be advised to “seek prompt medical care if notice scrotal abnormality”**
Teaching of testicular cancer (TC)

- Recommended by AAP
- USPSTF states no evidence exists that teaching young men how to examine themselves for TC improves health outcomes, even among men at high risk
- Include TC in differential when young men present with suggestive signs & symptoms:
  - Patients who present initially with symptoms of TC frequently diagnosed 1st having epididymitis, testicular trauma, hydrocele, or other benign disorders
Case Presentation #2

An 18 year old male off to college presents for a routine check up and physical examination. He has no complaints. During the Genital Examination, you observe that he is Tanner Stage V for testicular size and pubic hair, both testes are descended; however you palpate a hard small mass attached to the lateral side of the right testis.
Testicular Neoplasms

- Most common cancer of young men between 15 and 24 years of age
- Accounts for 3% of all cancer deaths in this age group
- May affect 1 in 10,000 young adults
- 6,000 - 8,000 new cases in the US each year
Testicular Neoplasms

- 40% of Germ Cell tumors are Seminomas
- Seminoma is the most common testicular cancer of a single cell type
- Bilateral tumors occur in 2 - 4% of patients
Testicular Neoplasms

- Most tumors are painless and discovered by young adult male during testicular self exam.
- Testicular pain may be early symptom in 18-46% of patients with germ cell tumors.
- Less common to see gynecomastia (from HCG secreting tumor).
- Seminoma can enlarge testis up to 10 times its normal size without change in shape.
Testicular Neoplasms: Evaluation

- Ultrasonography
- Tumor serum markers, Beta HCG, alpha fetoprotein
- CT
Case #3: 12-year-old male with right scrotal swelling
Swollen, tender testicle for 4 days

Pain started 4 days ago

Trauma to right testis 3 days ago
2 days ago right scrotum turns red
  ◦ Pain decreases

Today:
  ◦ Hurts to sit
  ◦ Hurts to wear underwear
- Denies fever, nausea, vomiting
- Denies dysuria, incontinence, hematuria
- Denies sexual activity
Vital Signs

- T 36.5° C
  - 97.7° F
- R 18
- P 78
- BP 111/66
Physical Examination

- Abdomen soft, non-tender
- Right scrotum tender, “full”
- Spermatic cord tender
- No inguinal hernia
Right Testis Ultrasound
Torsion of Testicle
DDX: Scrotal Swelling, Painful

- Testicular torsion
  - Testicular appendage
- Epididymitis
- Trauma
  - Ruptured testis, hematocele
- Indirect incarcerated inguinal hernia
- Orchitis
  - Mumps, Coxsackie B
Torsion of Appendix Testis
DDX: Scrotal Swelling, Painless

- Hydrocele
- Varicocele
- Indirect inguinal hernia
- Spermatocele
- Tumor
  - Teratoma, stromal tumor
- Henoch-Schoenlein purpura
- Idiopathic scrotal edema
Acute Scrotal Swelling

H & P → Surgery

Color flow Doppler ultrasonography

- Normal, increased flow: Testicular appendage torsion, Epididymitis, Hernia, Hydrocele, Tumor
- Absent flow: Testicular torsion
Benign Scrotal Masses

- Hernia
- Spermatocele
- Varicocele
Hernia Exam

Feel for hernia in the inguinal canal
Genital Hernia
Hernia with Hydrocele
Spermatocele

- Retention cyst of the epididymis
- Incidence is < 1%
- Patient may state that he has a “third testicle”
- Turbidity because of increased Spermatozoa - prevent transillumination
- Location is at head of epididymis
  - Above and behind testis
Spermatocele

Upon Palpation, feels separate from Testis
Varicocele

Most Common Scrotal Mass among Teens
Varicocele

- Elongated, dilated, tortuous veins of the pampiniform plexus
- More prominent when standing
- Incidence 9.25 - 25.8%
- Asymptomatic - picked up on routine exam
- Infertility Clinics: 30% of males have varicoceles
Varicocele

- May present as “ache” or “dragging sensation”
- Patient feels a “bag of worms”
- Occurs most often on Left side (85-95%)
Varicocele

- Treatment/Management if:
  - Scrotal pain
  - Bilateral or symptomatic varicoceles
Case #4

- Patient is a 17 year old male who presented to the Teenage Clinic stating that he noted a small mass on his right testicle 2 weeks ago when in the shower.
- He states that the mass is not painful
- He is not sexually active
- Ultrasound is performed the same afternoon
Homogeneous echotexture of both testes without a focal mass
Both testes have a few small cysts
5 mm cyst in the right scrotal wall
Largest cyst on the left measures 8 mm
Diagnosis: Epididymal cysts
Diagnostic Approach to Scrotal Masses

1. **PAINFUL**
   - **DISCHARGE**
     - **NO**
     - **TENDERNESS LOCALIZED**
       - **NO**
         - H/O PAROTITIS
           - **YES**
             - MUMPS ORCHITIS
               - **LOCATION**
                 - UPPER POLE
                   - EPIDIDYMIS
                 - UPPER APPENDIX
                   - EPIDIDYMIS
               - **NO**
                 - RADIONUCLIDE SCAN***/DOPPLER
                   - **NL TO ↑ UPTAKE NL TO ↑ PULSATIONS**
                     - TORSED APPENDIX OR EPIDIDYMIS
                   - **↓ UPTAKE ↓ PULSATIONS**
                     - SPERMATIC CORD TORSION
       - **YES**
         - EPIDIDYMIS

2. **DISCHARGE**
   - **YES**
     - EPIDIDYMIS
Diagnostic Approach to Scrotal Masses

- **PAINLESS**:
  - FIRM:
    - NO:
      - TRANS-ILLUMINATES:
        - NO: INCREASES WITH VALSALVA → VARICOCELE
        - YES: LOCALIZED IN TUNICA VAGINALIS (ANTERIOR AND INFERIOR TO TESTES) → HYDROCELE
    - YES: NEOPLASM

- **LOCALIZED IN EFFERENT DUCATAL SYSTEM (SUPERIOR TO TESTES) → SPERMATOCELE**
Case #5

- A 15 year old male is brought to you by his mother who states that he “may have a urinary infection”
- When you are in the exam room alone with this patient, he confidentially states that last evening he masturbated and the “sperm was pink”
- He feels very guilty and ashamed
- He denies any type of sexual activity including oral sex
Hematospermia
Hematospermia

- Not uncommon
- This condition may cause extreme anxiety or guilt
- Usually idiopathic and self limited
- Or related to an infectious disease such as prostatitis, Chlamydia or gonorrheal infection
- Extensive evaluation often not necessary
Case Presentation #6

- A 15 year old ♂ is in your office with a sports form to play Football. Upon history you are told that he had an Undescended testis removed at age 5 which is confirmed with your physical examination. Can you sign the sports form?
Pre-participation Sports Exam

- Undescended testicle or Absence on one testicle
  - Certain sports may require a protective cup
  - Athletes with a single testicle should wear a protective cup in all sports!
  - You may sign the Sports Form
A 15 year old male presents to the Teenage Clinic on New Year’s Eve with severe pain in the right testis for 1 day. He also complains of dysuria. He has been sexually active since age 14 with 3 female partners engaging in oral and vaginal sex. Condom use is inconsistent.
Case #7

Right

Left

Increased flow to testicle on right!
Epididymitis

- Inflammation of epididymis by infection or trauma
- Acute onset scrotal pain and swelling
  - Urinary frequency, dysuria, urethral discharge, fever
- Early: swollen epididymis
- Late: swollen testis, ± cremaster reflex
- Causative agent for infection dependent on age and sexual behavior
Epididymitis

- **Prepubertal male**
  - Urinary tract anomaly
    - VCUG, US if UC+
  - Abacterial
    - Urine reflux
  - Viral
    - Mumps
    - Coxsackie B

- **Adolescent male**
  - Sexually transmitted disease
Epididymitis

- Urethral discharge
  - N. gonorrhoeae
  - Chlamydia trachomatis

- Examination cannot distinguish from orchitis
  - Doppler flow
Epididymitis: Treatment

- Prepubertal male
  - Antibiotics pending urine culture
  - NSAID
  - Bed rest
Epididymitis: Treatment

- Presumed Gonococcal or Chlamydial in Sexually Active males; in other patients, organisms may include gram-negative bacilli, Mycobacterium TB etc.

- Ceftriaxone 250 mg IM + Doxycycline 100 mg po bid x 10 days
Epididymitis: Treatment

- If associated with gram-negative bacilli urinary tract infections, use one of the following alternatives:
  - Trimethoprim/Sulfamethoxazole DS BID x 10 days OR
  - Ciprofloxacin 500 mg PO BID x 10 days
Case Presentation #8

A 16 year old ♂ who plays varsity Football and works out every day at 24 hour Fitness comes in complaining of a clear discharge from his penis. He repeatedly denies having any type of sexual activity including oral sex. He does admit to masturbating every other day. He lifts weights every day and his bench press is 200.
Prostatitis

- Sexually Active?
  - Chlamydia
  - Neisseria Gonorrhea

- Not Sexually Active
  - Coliform Bacteria
  - Staphylococcus Saprophyticus
  - Mycoplasma hominis
  - Weight Lifters
Prostate Gland

- Prostatitis can be associated with hematospermia and post ejaculatory pain
Prostatitis
Prostatitis

The Rectal Exam!

Not routinely performed in the physical exam.

If Prostatitis is in the differential diagnosis, this would be one of the very few indications for a rectal exam in an adolescent male.
Treatment of Prostatitis

- Ciprofloxacin 500 mg: i tab bid x 14 days
As a result of participating in this conference, I plan to apply the following change(s) in my practice:

- Be more aware of the many concerns that an adolescent male may have with his changing anatomy and physiology during puberty.
- Be more comfortable in performing a genital exam on an adolescent male.
- Be prepared to resolve a clinical situation in which an adolescent male declines a genital examination.