



# Orchalgia

WHAT TO DO WITH THE MALE WITH CHRONIC TESTICULAR PAIN

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# Acute Testicular Pain

## ▶ Testicular Torsion

- ▶ Twisting of the cord resulting in loss of blood flow to the testicle
- ▶ Sudden onset, typically with nausea/vomiting
- ▶ Most common in < 25yo
- ▶ Needs immediate ER evaluation and surgical exploration. Time is testicle

## ▶ Trauma

- ▶ Testicular rupture

## ▶ Infectious – Epididymo-orchitis

- ▶ < 35 yo most common is C. trachomatis and N. gonorrhoeae, >35 yo most common is enteric GNRs

## ▶ Referred pain

- ▶ From kidney stone, hip pain, back pain, etc

## ▶ Tumor

- ▶ Ultrasound
- ▶ Tumor markers (LDH,  $\beta$ -hCG, AFP)
- ▶ Stat referral

# Chronic Orchalgia

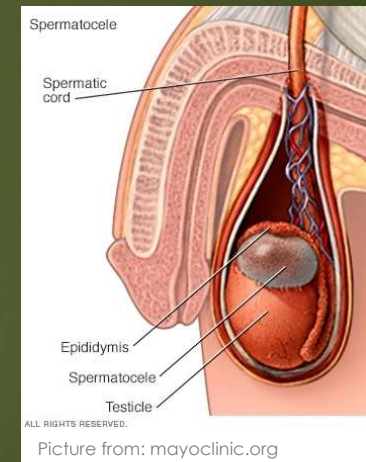
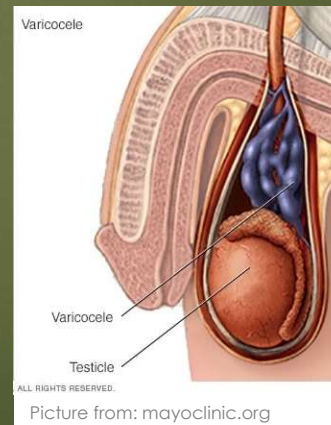
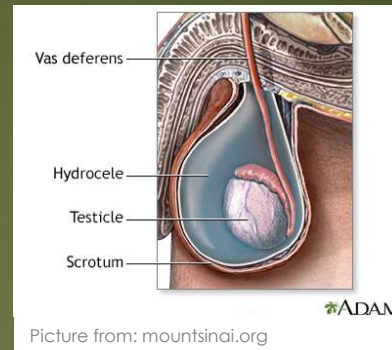
- ▶ Scrotal pain, intermittent or constant lasting at least 3 months
- ▶ Est 100,000 cases per year in US
- ▶ Most common age for presentation is 20-30 yo

## Some Causes of Chronic Testicular Pain...

- |                                |  |                             |
|--------------------------------|--|-----------------------------|
| ▶ Spermatocele                 | ▶ Chronic Epididymitis                 | ▶ AAA                       |
| ▶ Varicocele                   | ▶ Low back strain                      | ▶ Peritonitis               |
| ▶ Chronic pelvic pain syndrome | ▶ Vasculitis                           | ▶ Drug-induced (amiodarone) |
| ▶ Infection                    | ▶ Post-vasectomy pain                  | ▶ Pelvic MSK disorders      |
| ▶ Trauma                       | ▶ Nerve entrapment from hernia surgery | ▶ Osteitis pubis            |
| ▶ Fibrosis                     | ▶ Diabetic neuropathy                  | ▶ Somatization              |
| ▶ Tumors                       | ▶ Retroperitoneal tumors               | ▶ Irritable bowel syndrome  |
| ▶ Intermittent Torsion         | ▶ Interstitial cystitis                | ▶ Idiopathic                |

# Structural Causes

- ▶ Hydrocele
  - ▶ Fluid collection surrounding the testicle
  - ▶ 1% of adult males
- ▶ Spermatocele/epididymal cyst
  - ▶ Cyst in epididymis, rete testes, or along vas
- ▶ Varicocele
  - ▶ Dilation of the pampiniform plexus
  - ▶ Can impact fertility
- ▶ Inguinal Hernia
- ▶ Tumors



# Post-procedural

- ▶ Scrotal Surgery
- ▶ Post-vasectomy pain syndrome
  - ▶ ~1% of men after vas
  - ▶ Mean time of onset 7-24 months after vasectomy
- ▶ Inguinal Hernia Repair
  - ▶ ~5% men after hernia repair
- ▶ Laparoscopic renal surgery

# Referred Pain

- ▶ Sensory innervation - Ilioinguinal nerve, Genitofemoral nerve
  - ▶ Nerves from T10 – S4 can refer pain
- ▶ Kidney stones/renal colic
- ▶ Low back pain
- ▶ Hip pain
- ▶ Pelvic Floor Dysfunction
  - ▶ Often associated with bladder/bowel/sexual symptoms

# Inflammatory/Infectious

- ▶ Chronic inflammation from infection – Epididymitis
  - ▶ Gonorrhea/Chlamydia
  - ▶ Bacterial
  - ▶ Granulomatous (TB)
- ▶ Drug induced - Amiodarone

# Evaluation

- ▶ Rule out other causes for chronic testicular pain
  - ▶ Bowel dysfunction - IBS
  - ▶ Lower back pain/disk disease/hip pain (Hip or Spinal MRI)
  - ▶ Lower Urinary Tract Symptoms – Voiding dysfunction
  - ▶ Flank pain - Nephrolithiasis
- ▶ Scrotal Exam
  - ▶ Masses, hernia, infection
- ▶ Urine testing
  - ▶ Urine culture, GC/chlamydia, Mycoplasma/Ureaplasma
- ▶ Scrotal US w/ doppler



# Treatment

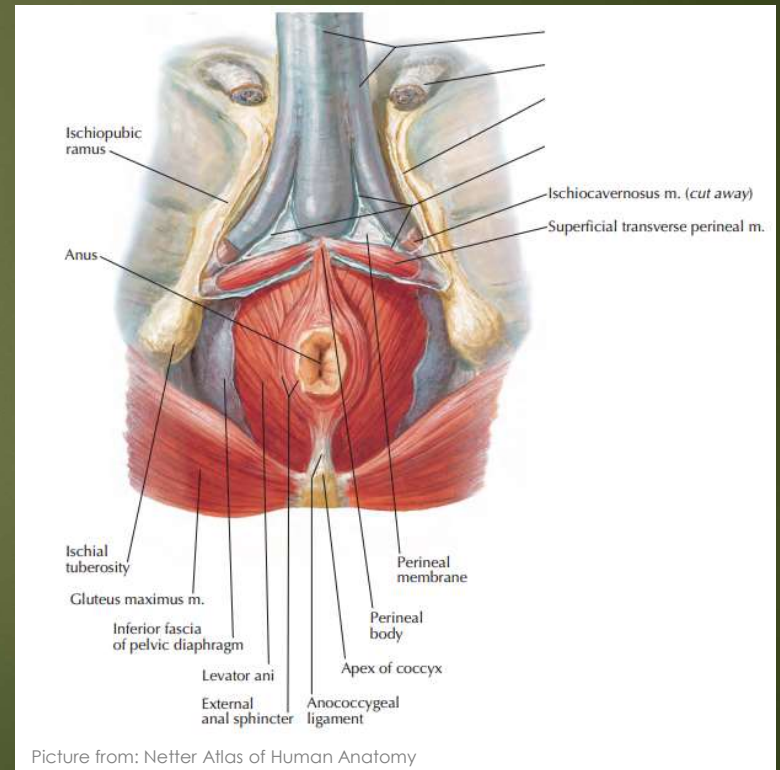
- ▶ Treat any associated underlying disease
  - ▶ Spermatocoele/Hernia/Epididymitis
  - ▶ MSK hip/back problems
  - ▶ Depression
  - ▶ Irritable bowel syndrome

# Treatment

- ▶ Conservative Therapy
  - ▶ Scrotal support, NSAIDs, Heating pads/baths
  - ▶ Neuropathic meds – Amitriptyline/Duloxetine, Gabapentin/Pregabalin
  - ▶ Stopping Amiodarone
- ▶ Dietary and lifestyle
  - ▶ Eliminate caffeine, hot spices, chocolate
  - ▶ Avoid constipation and prolonged sitting

# Treatment

- ▶ Pelvic Floor Physical Therapy
  - ▶ Useful primarily in pelvic floor dysfunction
  - ▶ Improves QOL even after other treatments
  - ▶ Low risk



# Summary

- ▶ Acute vs Chronic testicular pain
- ▶ Work-up
  - ▶ H&P
  - ▶ Urine testing (culture, G&C, Mycoplasma/Ureaplasma)
  - ▶ Scrotal Ultrasound
- ▶ Conservative Therapies
  - ▶ Scrotal support, NSAIDs, TCAs/SSRI, gabapentin/pregabalin
  - ▶ Treat infections
  - ▶ Treat associated underlying conditions
  - ▶ PFPT

Thank You

- ▶ Alfieri, S., Amid, P.K., Campanelli, G. et al. International guidelines for prevention and management of post-operative chronic pain following inguinal hernia surgery. *Hernia* 15, 239–249 (2011). <https://doi.org/10.1007/s10029-011-0798-9>
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