

## P-GU-006 EPIDIDYMITIS (PAINFUL SCROTAL SWELLING SYNDROME)

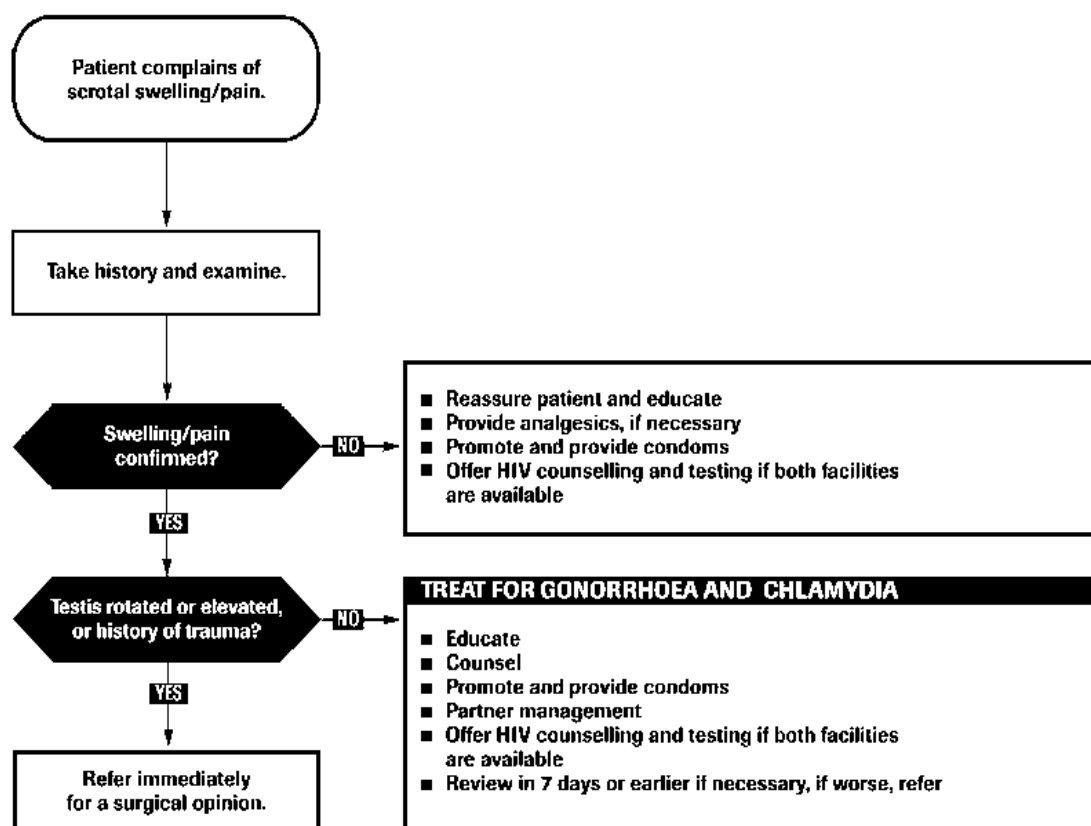
### DEFINITION & EPIDEMIOLOGY

- Epididymitis is a condition characterized by acute, unilateral, painful swelling of the testes accompanied with tenderness erythema and edema of the overlying skin.(1) The condition is gender specific to males with age group of men under 35 yrs.
- An estimated 1 in 1000 men develop epididymitis annually, and acute epididymitis accounts for more than 600,000 medical visits per year worldwide. Epididymitis is the fifth most common urologic diagnosis in men ages 18-50 years(2). There is no India specific data available regarding the epidemiology of the condition, it is assumed that the statistics are not skewed from that of the global data.

### ETIOLOGY

Etiology	Risk factors
Neisseria gonorrhoeae and Chlamydia are the two causative organisms responsible for acute inflammation of the testicular sac. Other organisms like T Palladium, M tuberculosis also exhibit the effect in later stages of the diseases and manifests as chronic epididymitis	<ul style="list-style-type: none"><li>• Unprotected sexual intercourse</li><li>• Immunocompromised conditions like HIV</li><li>• Poor personal hygiene</li><li>• Multiple sexual partners</li></ul>

### PATHOPHYSIOLOGY



## Signs & Symptoms (1–3)

<b>Specific symptoms</b> <ul style="list-style-type: none"><li>Swelling and pain in scrotum</li></ul>	<b>Common symptoms</b> <ul style="list-style-type: none"><li>Burning micturition, ↑frequency, Urgency</li><li>Dysuria</li><li>Fever</li><li>Malaise</li><li>Genital complaints in sexual partners</li></ul>
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## History

<b>H/O Present Illness</b> <ul style="list-style-type: none"><li>Onset of symptoms: when it started</li><li>Duration : duration of illness</li><li>Character of discharge: Ask about quantity, smell, color, and consistency</li><li>Any genital ulcer</li></ul>
<b>Past H/o</b> <ul style="list-style-type: none"><li>Previous H/o similar illness</li></ul>
<b>Personal H/o</b> <ul style="list-style-type: none"><li>H/o Unprotected sexual encounter/s</li><li>H/o Multiple sexual partners</li><li>H/o Recent change in sexual partners</li><li>H/o Condom breakage or other issues in its usage</li></ul>

## Vital Signs

- Body temperature: Possible high grade fever
- Heart rate: No specific changes
- Respiratory rate: No specific changes
- Blood Pressure: No specific changes

## Patient Examination(3)

Systems	Inspection	Palpation	Percussion	Auscultation	Positive sign
<b>General examination</b>	None	None	None	None	No specific finding
<b>CVS</b>	None	None	None	Routine CVS	No specific finding
<b>RS</b>	None	None	None	Routine RS-	No specific finding
<b>Abdomen</b>	None	None	None	Bowels sound	Pain aggravates during bowel movements
<b>Musculoskeletal system</b>	None	None	None	None	No specific finding
<b>CNS</b>	None	None	None	None	No specific finding

**Genital examination:**

*“Before genital examination explain the procedure, make sure proper privacy and get a consent from patient”*

- Redness and swelling of the urethral meatus
- Heaviness or swelling in the scrotal area
- Presence of urethral discharge
- May present with urethral discharge

**Diagnostic Test**

- Diagnosis can be done based on symptoms itself, if possible do genital examination.
- Lab investigation is additional option. If available the following can be done; however it is not necessary.
  - Gram stain examination of the urethral smear to demonstrate gram- negative intracellular diplococci in case of gonorrhea
  - First urine sediment – [smear oil immersion field (1000X)] > 5 non-gonococcal urethritis

**Diagnosis**

Epididymitis (Painful Scrotal Swelling Syndrome)

**Differential Diagnosis**

- Non STI Urinary tract infection
- BPH

**Treatment (1–7)****Non-pharmacological Management**

- Advise sexual abstinence during the course of treatment
- Advise to use Condom

**Pharmacological Management****Adults:****Antimicrobial**

- Tab. Cefixime 400mg orally, single dose **PLUS**
- Tab. Azithromycin 1 gm orally single dose under supervision **OR** Cap. Doxycycline 100mg twice a day for 7 days

*Note: Treat all sexual partners in the last 30 days with the above regimen.*

When symptoms persist (discharge or only dysuria persists after 7 days) after adequate treatment in the index client and partner(s), they should be treated for *Trichomonas vaginalis*.

- Tab. Metronidazole 400mg BD for 7 days **OR**
- Tab. Secnidazole 2 gm orally, single dose

**Special Groups:**

**Geriatrics:** similar dose as adult

**When to Refer**

- Non-responsive to treatment
- Recurrent cases
- Gonococcal arthritis

## References

1. Epididymitis and Orchitis: An Overview - American Family Physician [Internet]. [cited 2016 Dec 1]. Available from: <http://www.aafp.org/afp/2009/0401/p583.html>
2. Epididymitis: Practice Essentials, Background, Anatomy. 2016 Nov 15 [cited 2016 Dec 1]; Available from: <http://emedicine.medscape.com/article/436154-overview>
3. National AIDS Control Organization, STI/RTI Division. National Guidelines on Prevention, Management and Control of Reproductive Tract Infections and Sexually Transmitted Infections [Internet]. Department of AIDS Control, Ministry of Health and Family Welfare Government of India; 2014 Jul. Available from: <http://www.naco.gov.in/upload/2014%20mslns/National%20RTI%20STI%20technical%20guidelines%20Sep2014.pdf>