



Scrotal pain and Swelling

Color index :

Important

Further explanation

[Editing link](#)

Acute Scrotal Pain

DDx:

1) Testicular torsion :

- ❖ Twisting and strangulation of the testicle on the spermatic cord. Due to a congenital poor fixation of the testicle to the tunica vaginalis
- ❖ **Sudden and often occurs several hours after vigorous physical activity or minor trauma** to the testicles
- ❖ you should ask the patient about prior similar episodes that might suggest **intermittent testicular torsion**.
- ❖ Signs : red, swollen hemiscrotum that is usually too tender to palpate, **Absent cremasteric reflex** , Affected testis lies higher than contralateral testis , horizontal in position and **negative prehn sign** (there is no pain relief when the affected hemiscrotum is elevated).

2) Torsion of appendages : commonest for prepubertal boys

- ❖ Remnants of müllerian duct system located on the testicle or epididymis.
- ❖ Symptoms : Gradual pain at the upper part of the testis , The rest of the testis is not tender
- ❖ Signs : Blue dot (specific)at the top of the testis

3) idiopathic scrotal oedema

- ❖ Unknown cause
- ❖ Symptoms :Minimal pain ,usually bilateral
- ❖ Swelling and redness in scrotum

4) Epididymitis-orchitis : Commonest for post-pubertal boys

- ❖ Both testis and epididymides are involved in the acute inflammatory reaction.
- ❖ The affected side of the **scrotum is swollen usually unilateral , inflamed and very tender**.
- ❖ There are usually constitutional symptoms of malaise and fever
- ❖ may be accompanied by **urinary tract infection with dysuria and frequency**.

5) Fournier's gangrene : **necrotizing fasciitis of the perineum**.

severe pain, starts on the anterior abdominal wall, migrating into the gluteal muscles and onto the scrotum and penis, Pain is accompanied by edema outside the involved skin, blisters/bullae, crepitus, + systemic findings : fever, tachycardia, and hypotension.

6) Trauma/surgery

7) Testicular cancer :

- ❖ Usually painless swelling, gradual onset

8) Strangulated inguinal hernia :

- ❖ **Hx of previous intermittent inguinoscrotal swelling, sudden onset of pain and inability to reduce the hernia**

9) Henoch-Schönlein purpura (IgA vasculitis)

10) Mumps

11) Referred pain:

- ❖ Men who have the acute onset of scrotal pain without local inflammatory signs or a scrotal mass on examination may be suffering from referred pain to the scrotum/ abdominal aortic aneurysm, **urolithiasis**

Personal Data	
Chief complaint Scrotal Pain , +/- redness , +/- swelling	
History of presenting illness : SOCRATES	
site	<p><u>Diffuse:</u></p> <ul style="list-style-type: none"> - Testicular torsion - Hydrocele, varicocele <p><u>Upper pole of testis:</u></p> <ul style="list-style-type: none"> - Torsion of testicular appendage <p><u>Epididymis:</u></p> <ul style="list-style-type: none"> - Epididymitis - Epididymal cyst
onset	<p><u>ACUTE</u></p> <ul style="list-style-type: none"> - Testicular torsion <p><u>SUBACUTE</u></p> <ul style="list-style-type: none"> - Epididymitis - Torsion of testicular appendage - Orchitis - Fournier's gangrene <p><u>NONACUTE</u></p> <ul style="list-style-type: none"> -Varicocele -Hydrocele -Testicular cancer -Epididymal cyst
character	<p><u>Sharp :</u></p> <ul style="list-style-type: none"> - Testicular torsion - Torsion of testicular appendage <p><u>Dull :</u></p> <ul style="list-style-type: none"> - Hydrocele - Varicocele
relieving factor	Elevation of the scrotum ? epididymitis

Associated symptoms :	<p>Fever: Epididymitis / Testicular torsion Trauma / Appendicitis</p> <p>Nausea/vomiting: Testicular torsion / Trauma</p> <p>Dysuria: Epididymitis / Trauma</p> <p>Hematuria: • Epididymitis</p> <p>Scrotal swelling: -Epididymitis -Testicular torsion -Torsion of testicular appendage -Trauma</p> <p>Abdominal pain: Testicular torsion Torsion of testicular appendage Fournier's gangrene</p> <p>Gynecomastia Testicular cancer Arthralgia, Gastrointestinal bleeding Henoch-Schönlein purpura</p>
timing	<p>After sexual activity or physical activity ? Testicular torsion, Torsion of testicular appendage</p> <p>After vasectomy? Epididymitis</p> <p>After prolonged sitting ? Epididymitis (inflammatory)</p> <p>After trauma ? Testicular rupture/Testicular torsion</p> <p>After urinary procedure ? Epididymitis</p> <p>Come during the day and disappear after lying down ? hydrocele</p> <p>Increase the size after upper respiratory viral infection ? hydrocele</p>
exacerbating factors	<p>elevation of the scrotum ? testicular torsion</p>
severity	<p>Moderate: Torsion of testicular appendage Epididymitis</p> <p>Severe : Testicular torsion</p>
	<p>past history: same symptoms ? recent surgery or instrumentation family history ?</p>

Summary :

- ❖ Sudden sharp diffuse pain and swelling + Recurrent episodes of pain + Pain after trauma abdominal pain + NV (Testicular torsion)
- ❖ Sharp pain in the upper pole of testis with scrotal swelling and abdominal pain (Torsion of testicular appendage)
- ❖ Dull, aching diffuse pain with scrotal swelling (Hydrocele)

B- Undescended testis :

True Undescended Testis "Retained testis"

- ❖ The testis stopped migration anywhere in the normal pathway above the scrotum
- ❖ Presentation: Absence of one or both testes from the scrotum Or scrotum has not developed

Ectopic :

- ❖ If the testis stops migration anywhere rather than the normal pathway,
- ❖ Commonly in the superficial inguinal pouch.
- ❖ Absence of a testis is the common presenting but the patient also may complain from pain Or discomfort during physical activity due to the testis compressed

True and Ectopic management :

- ❖ Palpable =Open Orchiopexy
- ❖ Not palpable : Laparoscopy-assisted Orchiopexy
- ❖ The treatment should be done at the age of 6-12 months to give a chance for spontaneous testicular descent after birth.

Retractile:

- ❖ Testis at the scrotum at birth but goes up again, appear and disappear due to hyperactivity of the cremasteric muscle
- ❖ Surgery is unnecessary ultimately descend properly before/ or at puberty

Patient with Undescended testis Will present with :

- ❖ Empty scrotum
- ❖ The testis could be : Palpable or not

C- Hydrocele

- ❖ common condition in old men
- ❖ fluid collects in the tunica vaginalis, resulting in an enlarged but painless scrotum.
- ❖ The cause of most hydroceles is unknown (idiopathic).
- ❖ The fluid is straw coloured and protein-rich.
- ❖ Signs : Non reducible Scrotal swelling, Painless , Transilluminates , the testicle cannot be felt

Hydrocele

In the Hx you should ask about :

- Premature baby or not ?
- His weight at birth ?
- Is there any similar condition in his family

