



# *History & Physical Examination of Genitourinary system*

# Flank Pain

## History:

Chief Complain : Flank Pain		
Question	Indications	
<b>Site:</b>	Stone	Acute Pyelonephritis
usually spreads his hand around his waist	start at loin area and along with the line of the ureter	<b>sever</b> pain in one or both lions
<b>Onset:</b>		
Sudden or Gradual ?	sudden pain with free period between attacks.	sudden pain
<b>Character:</b>		
Can you describe the pain?	ureteric colic, it's griping in nature	*
<b>Radiating:</b>		
Does the pain radiate? IF YES: to where?	pain start at lion and then radiates downward , around the waist obliquely across the abdomen just above the inguinal ligament to the penis , the scrotum , labia	*
<b>Relieving &amp; aggravating factors:</b>		
What makes the pain <b>worse</b> ? & What <b>relives</b> the pain?	the patient tries to <u>relieve</u> the pain by rolling around the bed or walking about	*
<b>Severity:</b>		
How would you describe the severity of the pain ?		
<b>Associated Symptoms:</b>		
	Sweating Nausea, vomiting Hematuria	- micturition become frequent and painful(burring sensation) - headache , malaise , nausea , vomiting , sweating

## Renal Stones

Types of stones	Cause of stone formation
Calcium oxalate (85%)	Hypercalciuria / hypercalcaemia / hyperoxaluria / hypocitraturia
Uric acid (10%) (radiolucent)	Increase in uric acid formation (gout , myeloproliferative disorder )
Magnesium –ammonium phosphate (5-15%) <u>struvite</u>	Urinary tract infection pathogen break urea down into (Co2 and ammonia ) therapy alkalinization the urine ( proteus mirabilis )
Calcium phosphate (10%)	Secondary to tubular acidosis
Cystine (1%)	
Inhibitors for stone formation → citrate , Mg , urinary proteins (nephrocalcin )	
Promoter for stone formation → oxalate , coffee, chocolate , soda drinks	
Investigation → non-contrast CT is the modality of choice + urinalysis	
<b>Management →</b> <ul style="list-style-type: none"> <li>• Medical : <ul style="list-style-type: none"> <li>✓ Pain relief</li> <li>✓ Hydration</li> <li>✓ Wait (95% of stones measuring 5mm or less will pass on their own)</li> </ul> </li> <li>• Surgical: <ul style="list-style-type: none"> <li>❖ Temporary relieve of obstruction : <ul style="list-style-type: none"> <li>✓ JJ stent from renal pelvis to bladder</li> <li>✓ Percutaneous nephrostomy tube</li> </ul> </li> <li>❖ Definitive treatment: <ul style="list-style-type: none"> <li>✓ ESWL</li> <li>✓ PCNL</li> <li>✓ URS</li> <li>✓ Laparoscopic extraction / Open surgery</li> </ul> </li> </ul> </li> </ul>	

\* Those were not mentioned in Talley's neither Browse's



*Done By :*

Abdullah Al-Drihem

Ahmed Al-Hussain

Mishari Al-Shasha

Areej Al-Wahaib