Hernia

PREPARED BY

DR AFRAZ SHERAZI

Hernia

1 History

Introduction: Greet the patient, introduce yourself, explain what you plan to do, & take Patient ID	
Focused hx	
Site	• Where is the swelling? • Unilateral or bilateral? (Indirect and congenital)
Onset, duration, timing	• When did it start? • Did it start suddenly or gradually? • Constant or intermittent? • Progressive?
Character	• Can you describe the size? • Does it change in size with coughing/straining? • Shape? • Covered by skin? • Pain? (If yes → Where? Constant or intermittent? Dragging/dull ache? Colicky? Exacerbated by physical activity? How severe from 1-10?)
Alleviating & Exacerbating F	• Is there anything that makes it bigger? • Is there anything that makes it smaller? Like lying down?
Severity	• Can you reduce the swelling with your hand? Before and now? (Incarceration) • Do you have abdominal pain? Constipation? Can't pass gas? Vomiting? (Obstruction) • Severe constant pain? Skin changes like redness? Warm? (Strangulation)
Associated symptoms & Risk factors? "Think straining"	• Chronic cough? Bronchitis? TB? Asthma? (Respiratory) • Urine dribbling? Weak stream? BPH? Strictures? (Urinary) • Chronic constipation? • Do you lift heavy weights? • Any abdominal surgeries? • If female → Number of children? C-section or natural?
Constitutional Symptom	• Nausea? Night sweating? Fever? Fatigue? Weight loss? Loss of appetite?
Finishing & Thank the patient	

Hernia

2 Examination

WIPER: wash hands, introduce yourself, permission, expose patient, reposition

Exposure: from the nipples down to mid thigh Postion: Standing & supine

Inspection 7S

once you suspect this lump to be hernia ask him/her to stand this allow hernia content to fill the hernia sac and make the hernia obvious on physical examination and continue hernia examination while the patient standing position. If you examine the patient while lying down you will not be able to do proper examination or even detect hernia at all (except for femoral hernia which can be seen while the patient is lying down).

On standing position if hernia detected (always examine both groins) look at swelling from in front:

- **Site**
  - Inguinal hernia: will be visible in the groin for all except for obese.
  - Femoral hernia: the neck of femoral hernia or the point at which it disappear into the abdomen is below the inguinal ligament and lateral to pubic tubercle.
- **Shape**
  - Inguinal hernia: an indirect hernia moving obliquely along the inguinal canal towards the scrotum is sausage shaped, but when it extends beyond the external inguinal ring it widens out to become pear shaped. A direct hernia is usually round, like a plum in the groin.
  - Femoral hernia: the lump is almost spherical, and the neck cannot be defined clearly.
- **Size**
  - Inguinal hernia: size ranging from small to large (the larger unlikely to be irreducible).
  - Femoral hernia: most of them are small.
- Extension into the **scrotum.**
- **Skin changes** (pigmentation, redness, dilated visible veins, Discharge etc)
- **Scrotal swellings.**
- **Swelling in the other side.**
- **Cough Impulse** (do it at the beginning if the hernia is not detected while pt. is still lying, three times each one look to special site)

Palaption:

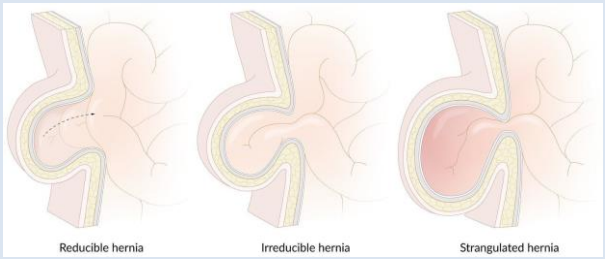
- From the front: Examine the scrotum and its contents. in males, first decide whether the lump is hernia or a true scrotal lump by seeing if you can go above it
- From the side: stand at the side of the patient on the same side of hernia place one hand on the back of the patient to support him and your examining hand over the swelling with your finger and arm roughly parallel to inguinal ligament and acertin the character of the inguino- scrotal swelling
  - Tenderness
  - Edge
  - Consistency
  - Temp (warmer when strangulated)
  - Fluctuation
  - Tension
  - Expansile cough impulse (ask the pt to look away when coughing)
  - **Reducibility** is VERY IMPORTANT and holds the greatest clinical value among all!

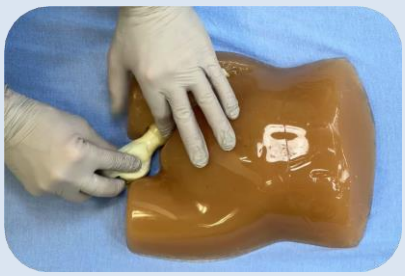
Hernia

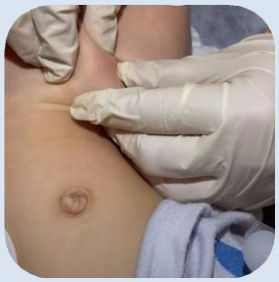
2 Examination

Reducibility

- You may need to examine the patient in supine position for reducibility.
- Ask the patient to reduce hernia himself as he knows better than you.
- How to do it: Press firmly to reduce the tension of the swelling and then gently squeeze the lower part of the lump.
- As the lump gets softer, lift it up towards the external ring. It is important not to hurt the patient during this procedure as the muscles will become tense and make further efforts at reduction impossible.
- Once it has all passed in through this point, slide your fingers upwards and laterally towards the internal ring to see if the hernia can be controlled (kept inside) by pressure at this point.
    - If the hernia can be held in the reduced position by pressure over the internal ring, it is an indirect inguinal hernia.
    - If it is above the inguinal ligament and cannot be controlled by pressure over the internal ring, it is a direct hernia.

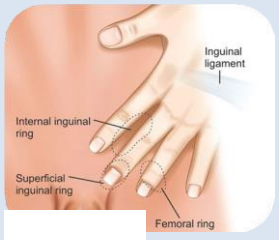






Three fingers test \ zieman's technique (vedio)

- **Put your hand in the following manner in picture & ask patient to cough**
- **if the content of hernia felt on :**
    - **Index** (deep inguinal ring) : → indirect hernia
    - **Middle** (superficial inguinal ring) : → direct hernia
    - **Ring** : → femoral hernia



Move to the other side and examine it

Feel the scrotal content on each side

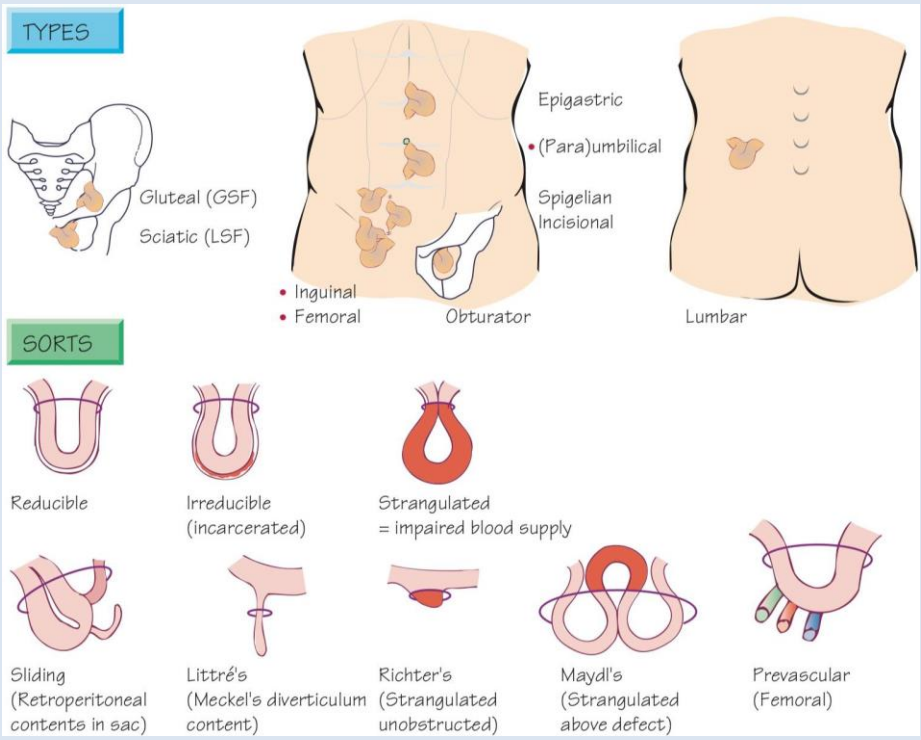
- Transillumination if indirect to differentiate from hydrocele)

Percuss and auscultate

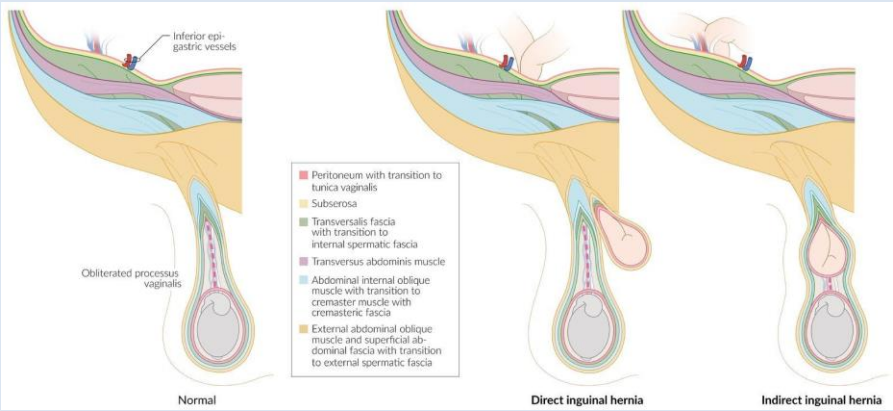
- Over the inguinal swelling if the hernia contain bowel the percussion will be resonant and you will hear the bowel sound on auscultation.

Hernia

3 Theoretical Notes



Direct inguinal hernia	Indirect inguinal hernia
Outside the spermatic cord	inside the spermatic cord
Not or rarely extend to the scrotum	usually extend to the scrotum
Wide neck of the hernia sac	narrow neck of the hernia sac
Medial to the inferior epigastric artery	lateral to the inferior epigastric artery
Less common	More common
Occur in old age	Occur in babies and adult
Not enter from the deep ring	Enter from the deep ring
Go out from the superficial ring	Go out from the superficial ring



Station's Name : Abdominal Wall Hernia Examination

Candidate's name :
Date of examination:
Time of the station : 6 mint

A=complete answer/satisfactory(2)
B=Partial answer/unsatisfactory(1)
C=Not attempted /wrong(0)

	Introduction	A	B	C	Mark
1	Greeting the patient& Self-introduction				
2	Permission & establishing the plan for visit				
3	Wash hands				
4	Positioning & Exposure of patient				
5	Ask the patient about any pain				
	Inspection	A	B	C	Mark
6	symmetry of the abdomen (from the foot end of bed)				
7	Movement with respiration, type of respiration (thoracic, Abdominthoracic) (from the foot end of bed)				
8	Umbilicus (position & relation to swelling)				
9	Skin changes(discolor, scar, dilated veins, striae & changes over swelling)				
10	Site				
11	Size & shape of swelling				
12	Visible Cough impulse to check hernial orifices(groins, umbilicus, scars)				
13	Lift head of the bed (tense rectus M.) to check mobility				
	Palpation	A	B	C	Mark
14	Ask the patient to cough (palpable cough impulse)				
15	Surface (regular / irregular)				
16	Margins or Edges (regular / irregular)				
17	Tenderness				
18	Temperature over the swelling in relation to the adjacent skin				
19	Consistency				
20	compressibility& Reducibility(if reducible type content)				
21	Fluctuant test, Thrill/pulsation,				
22	Transillumination test				
	percussion	A	B	C	Mark
23	Over the swelling				
	Auscultation(by diaphragm)	A	B	C	Mark
24	Over the swelling				
	Finishing	A	B	C	Mark
25	Cover the patient & thank him				

Differential diagnosis of an inguinal hernia

- Femoral hernia
- Hydrocele
- Undescended testis
- Lipoma of the cord

Differential diagnosis of femoral hernia

- Inguinal hernia
- Enlarged lymph gland
- Saphena varix
- Ectopic testis
- Psoas abscess
- Psoas bursa
- Lipoma

Differential diagnosis of a lump in the groin

- Inguinal hernia
- Femoral hernia
- Enlarged lymph glands
- Saphena varix
- Ectopic testis
- Femoral aneurysm
- Hydrocele of the cord or hydrocele of the canal of Nuck
- Lipoma of the cord
- Psoas bursa
- Psoas abscess

How u can differentiate between inguinal hernia and hydrocele ?

1. Transillumination test
2. Can get above it :
   a. no : hernia
   b. yes : hydrocele)