

# Surgery – General Surgery

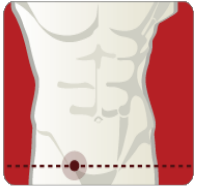
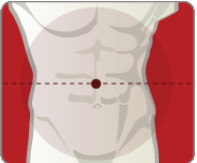
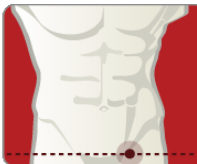
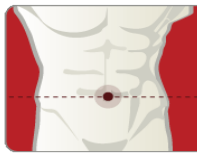
## Hx and Ex of “HERNIA”

### A. Overview:

A hernia occurs when an organ pushes through an opening in the muscle or tissue that holds it in place. For example, the intestines may break through a weakened area in the abdominal wall.

Hernias are most common in the abdomen. However, they can also appear in the upper thigh and groin regions. Though the majority of hernias are not immediately life threatening, they will not go away on their own and will require surgical correction to prevent potentially dangerous complications.

We have different types of hernia

Types	More about it
<b>Inguinal hernias</b> The commonest	Inguinal hernias can be classified as "direct" or "indirect". <ul style="list-style-type: none"><li>• An <b>indirect inguinal hernia</b> occurs through the natural weakness in the internal inguinal ring.</li><li>• A <b>direct inguinal hernia</b> is a result of weakness in the floor of the inguinal canal</li></ul> 
<b>Ventral Hernias</b>	Appear in the abdomen at the site of a previous surgery is known as a <u>ventral</u> or <u>incisional</u> hernia. 
<b>Femoral Hernias</b>	Femoral hernias, along with inguinal hernias are groin hernias. 
<b>Umbilical Hernias</b>	Occur near the bellybutton or navel, which has a natural weakness from the blood vessels of the umbilical cord. These hernias may occur in <b>infants</b> at or just after birth. 
<b>Epigastric Hernias</b>	They occur due to a weakness, gap, or opening in the muscles or tendons of the upper abdominal wall.
<b>Hiatal Hernias</b>	They are a weakness or opening in the diaphragm.

## B. History:

CC: usually the patient will present with **pain, lump** and **discomfort in anatomical site of hernia.**

### Questions

#### Personal data:

Name, age, sex, nationality, from where the patient was admitted (E.R, elective) and for how long he is in the hospital.

#### Chief complaint:

The reason that made you came + for how long.  
E.g. (Groin swelling for 6 months)

#### History of the present illness:

1-How he observes it.

3- Any changes in the size.

5- Any other swelling

2-When he observes it.

4- Any associated symptoms as pain, fever, vomiting, constipation abdominal pain or distention

#### If the patient present with **pain**

**SOCRATES** stands for Site, Onset, Character, Radiation, Associated factors, Time, Exacerbating/relieving factors, Severity (pain history)

#### Ask about symptoms of complications **as symptoms of intestinal obstruction:**

Vomiting, abdominal pain, constipation and distention.

#### Ask about the predisposing factors for the hernia as:

##### General factors:

- Lifting heavy object.
- Chronic cough.
- Chronic constipation.
- Abdominal distention (ascites or mass).

#### Constitutional symptoms:

Fever, loos of appetite, loos of weight.

#### Past medical history:

- Abdominal surgery or trauma.
- Muscles disease.
- Previous lump or hernia.

#### Family Hx of hernia.

Drug Hx: **ACE inhibitors " chronic cough"**

# Physical Examination

Exactly the same as abdominal examination just you will add some steps.

## A. Start the examination with: WIPE

1. **Wash hands:** Wash your hands in front of the examiner or bring (sanitizer with you)
2. **Introduce yourself:** My name is (your name), I'm a third year medical student
3. **Explain the examination**
4. **Position:** lying down (if the examiner asks you to **examine the hernia ask the patient to stand up** then he can be in supine position for abdominal examination).
5. **Exposure** from the **upper abdomen to the mid-thigh.**

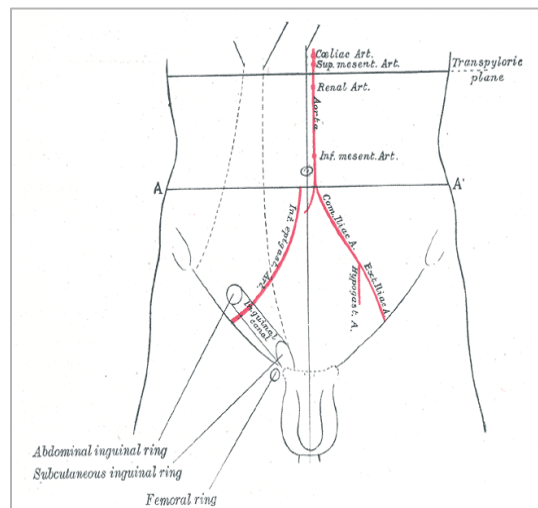
## Inspection:

1. Deal with it as **lump**: 4Ss, color ... etc.
2. Ask the patient to **cough**: to see if there is positive cough impulse.
3. Look for **other** hernia orifices.

**DO NOT FORGET THE  
COUGH IMPULSE**

## Palpitation: ask about pain first

1. **Examine the lump:** "go to lump examination"
2. **Cough impulse:** expansible or not
3. **Position:** while the patient is lying ask him to sit without using hands and look at the lump if it:
  - ✓ Disappear: intra-abdominal
  - ✓ Increase in size: superficial.
  - ✓ No change: intramuscular
4. Then you do transillumination test and thrill test as in lump examination.



## After that, we have to know either if it's direct or indirect inguinal hernia

- So, we ask the patient to reduce the lump, if he couldn't so you reduce it, then hold your Finger against deep inguinal ring ( 2cm midway b/w the anterior superior iliac spine and the pubic tubercle = 2 cm above the mid inguinal ligament)
- Then, ask the patient to stand up and cough (forced cough):
  - ✓ If the lump **reappears** >> it is **direct inguinal hernia**.
  - ✓ If the lump **doesn't** reappears >> remove your finger, then ask the patient to cough again if it reappears >> it is an **indirect inguinal hernia**.
- **N.B** if you see the lump extended to the neck or base of the scrotum, so it **is indirect inguinal hernia**, but you should do scrotal neck test to **differentiate b/w scrotal & inguinoscrotal** swelling by Putting your thumb on the front of the neck of the scrotum and the index & middle fingers on the back of the scrotum
  - ✓ If you **can** go above the swelling >> it is **scrotal swelling**.
  - ✓ If you **can't** go above the swelling >> it **is inguinoscrotal swelling**.

### Percussion:

- ✓ Dull or resonance

### Auscultation:

- ✓ Note bowel sounds (normally 2-3 sounds per 2 minutes)
- ✓ If there any bruit

### Others:

- ✓ State of local tissue and scars.
- ✓ Look for causes of increase intra-abdominal pressure e.g. ( chronic bronchitis, urine retention , constipation, intestinal obstruction)

### B. End the examination with: (to complete my Ex)

- ✓ I will do **PR / PV** and I will expose the genitalia.

## Abdominal umbilicus

Abnormality	Indicates
Fecal discharge	Advanced colon cancer
Hard nodule	Intraperitoneal malignancy
Everted ( out )	Hernia or ascites

### Three important terms

- 1- **Herniotomy**: excision of the hernia sac.
- 2- **Hernio-rrhaphy**: enforcement of the abdominal wall can be accompanied with Herinotomy.
- 3- **Hernio-plasty**: put a graft natural or synthetic to reinforce the abdominal wall .

## NOTE

Dr. bamehriz said that we **will not perform the real examination** of the hernia with all the steps, the examiner just want to see if we know how to examine a hernia (so it's almost abdominal examination).

## 432 OSCE TEAM

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