

## Hernia


is a protrusion of the whole or part of a viscus from it's normal position through abnormal opening in the wall of its containing cavity.





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# Etiology of hernia

- 1- congenital/ primary •
  - 2- secondary to raised intra-abdominal pressure •
    - a- chronic cough •
    - b- constipation (straining at defecation) •
    - c- cysts •
    - d- carcinoma •
    - e- pregnancy •
    - f- bladder outlet syndrome (bladder-neck or urethral obstruction) •
    - g- repeated vomiting •
    - h- severe muscular effort •
    - i- ascitic fluid fill an existing sac •
  - 3- Iatrogenic- incisional •
- 

## The types of hernia according to area •

### 1- inguinal hernia

- in male--- due to weakness in abdominal wall spermatic cord emerges, enters inguinal canal and then scrotum.
- In female--- due to weakness in abdominal wall where a round ligament is located enters inguinal canal and then labia.

#### --- direct inguinal hernia

Medial-to-deep epigastric artery (majority are acquired).

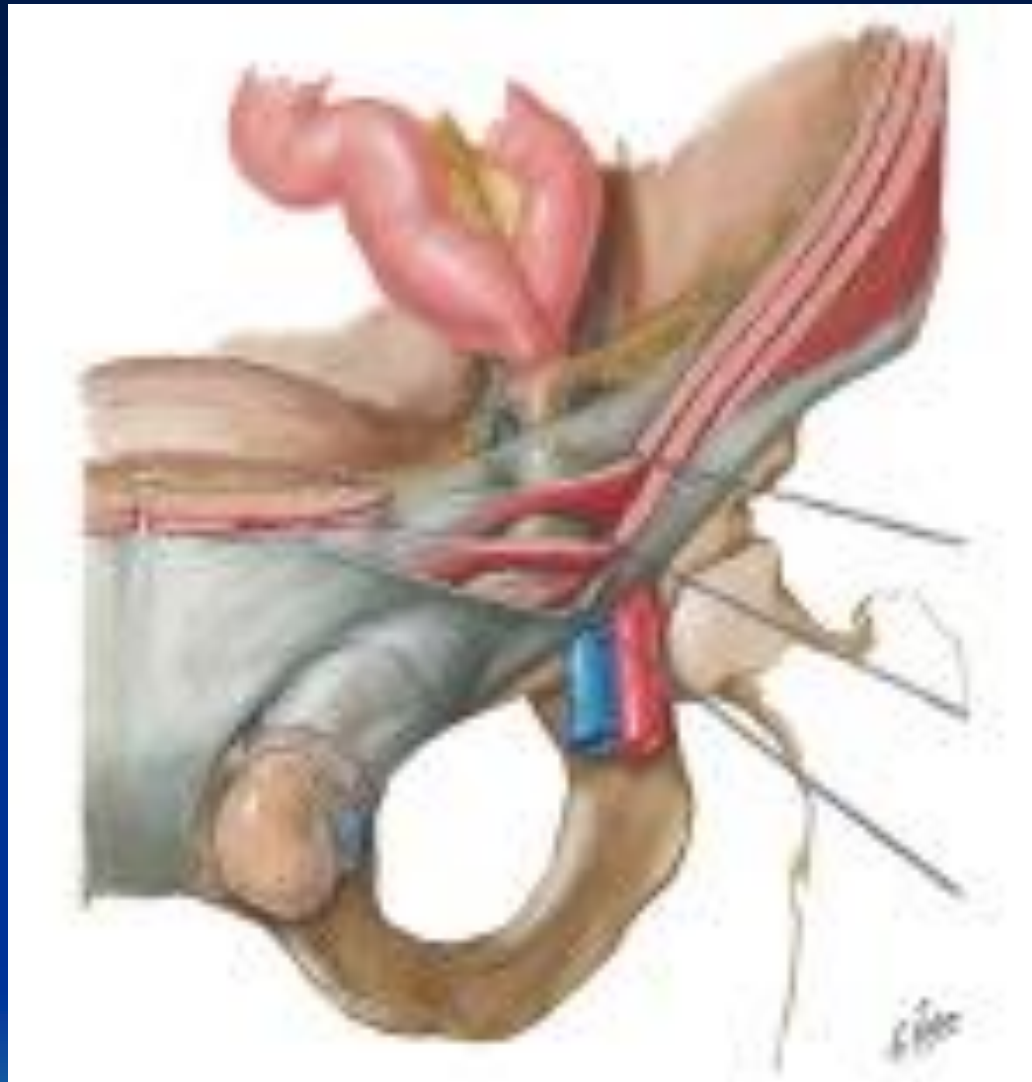
#### ---indirect inguinal hernia

Lateral-to-deep epigastric artery ( majority are congenital).

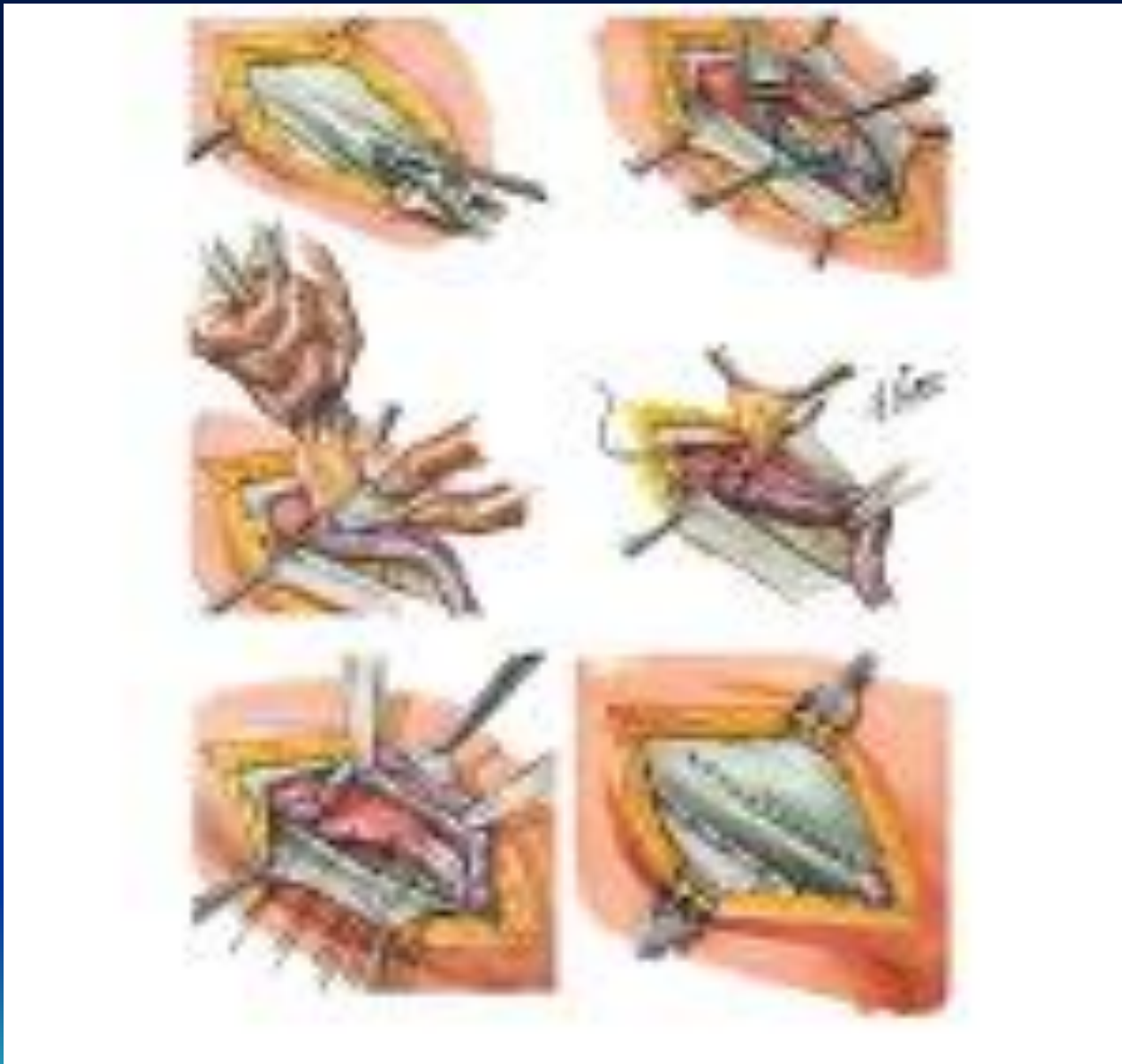
### 2- femoral hernia

- occurs most often in women.
- Located below Poupart's ligament (below groin)





Coverings of Complete Indirect Inguinal Hernia



Indirect and Direct Inguinal Hernias



## Inguinal and Femoral Regions

3- umbilical and para umbilical hernia•  
failure of umbilical orifice close. •

Occurs most in obese women and children•

4-Incisional hernia

a- due to weakness in abdominal wall.

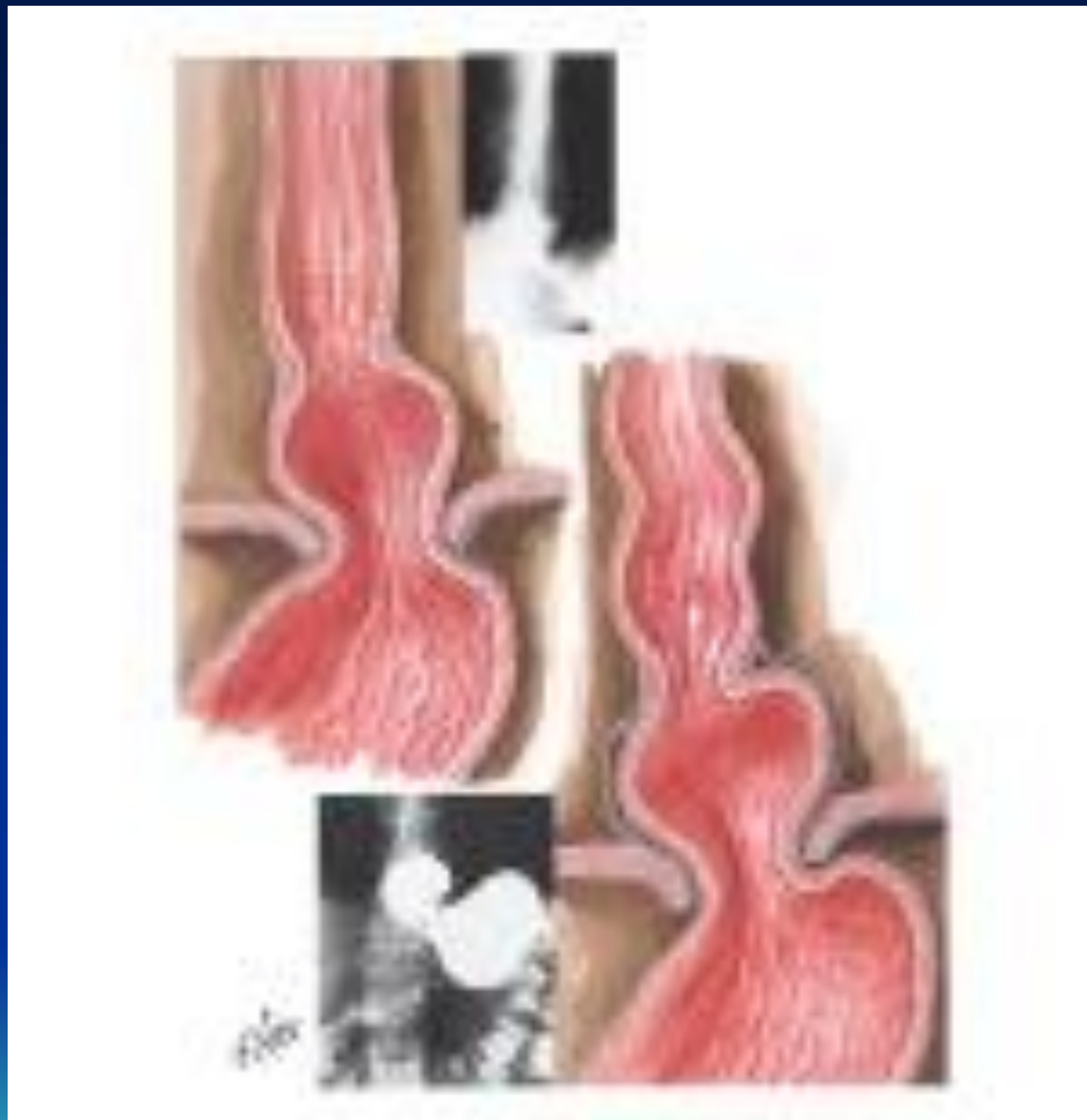
b- may occur following impaired healing of  
incision because of drainage and infection.

5- hiatal hernia (esophageal hernia)

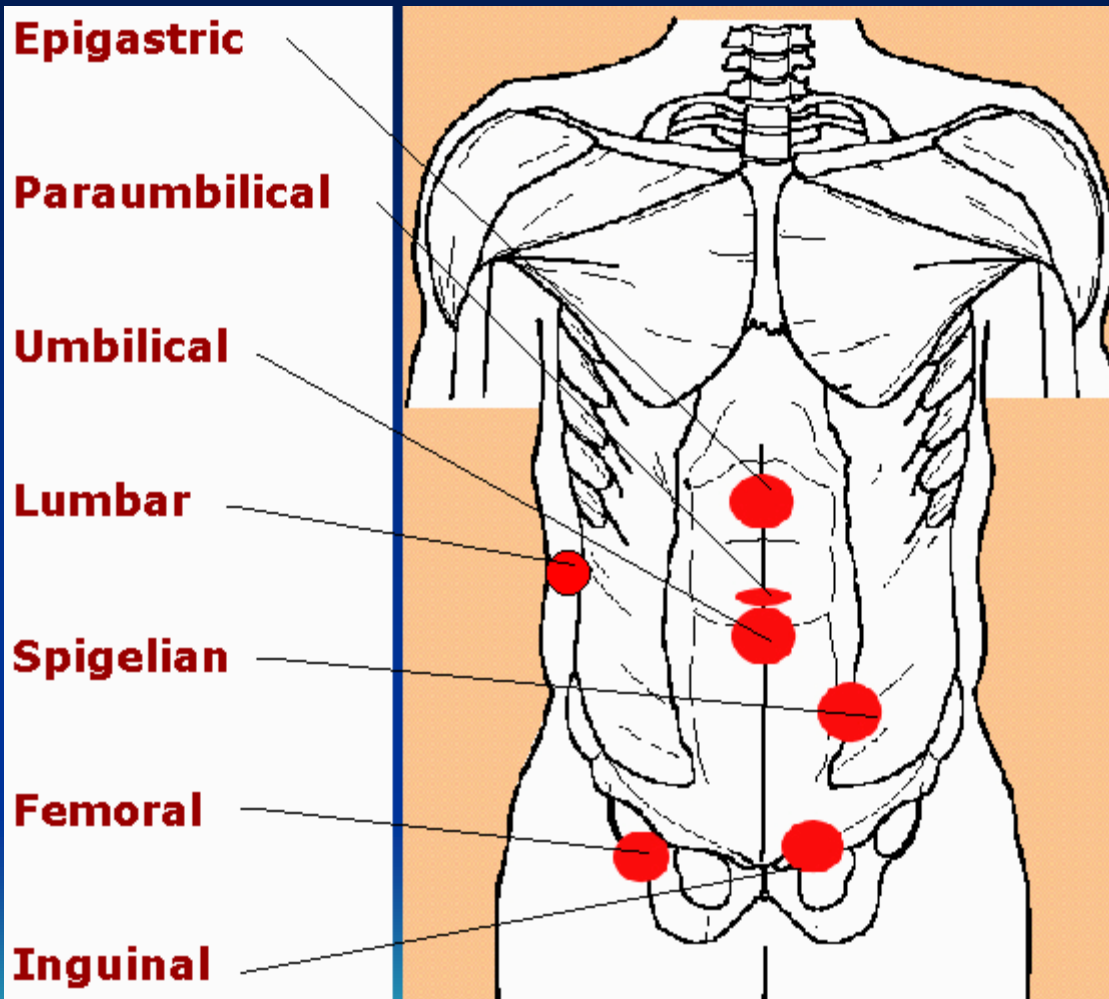
Protrusion of the stomach through the  
diaphragm into the thoracic cavity.







Thoracic Stomach I - Short Esophagus, Sliding Hernia



# The types of hernia according to severity

- 1-reducible--- the contents of sac completely returned to abdominal cavity. •
- 2-Irreducible--- the contents of sac cannot be completely returned to peritoneal cavity. •
- 3- Obstructed-- when there is constriction of the neck of the sac causing a mechanical obstruction of the contents( e.g. small-bowel obstruction) but the contents remain viable. •
- 4-Strangulated-- most commonly in femoral hernia( also indirect inguinal and umbilical). Implies ischemia of sac contents, which in the case of bowel may become gangrenous and perforate, this being the end stage of irreducibility and obstruction. •





# Clinical manifestation of hernia (s&s)

- a. sudden onset of pain in a hernia
- b. central colicky abdominal pain.
- c. Vomiting
- d. Absolute constipation of flatus and feces.
- e. Abdominal distention
- f. Skin overlying hernia may be red and edematous
- g. Tense, tender and irreducible hernia
- h. No cough impulse
- i. Bowel sounds increased

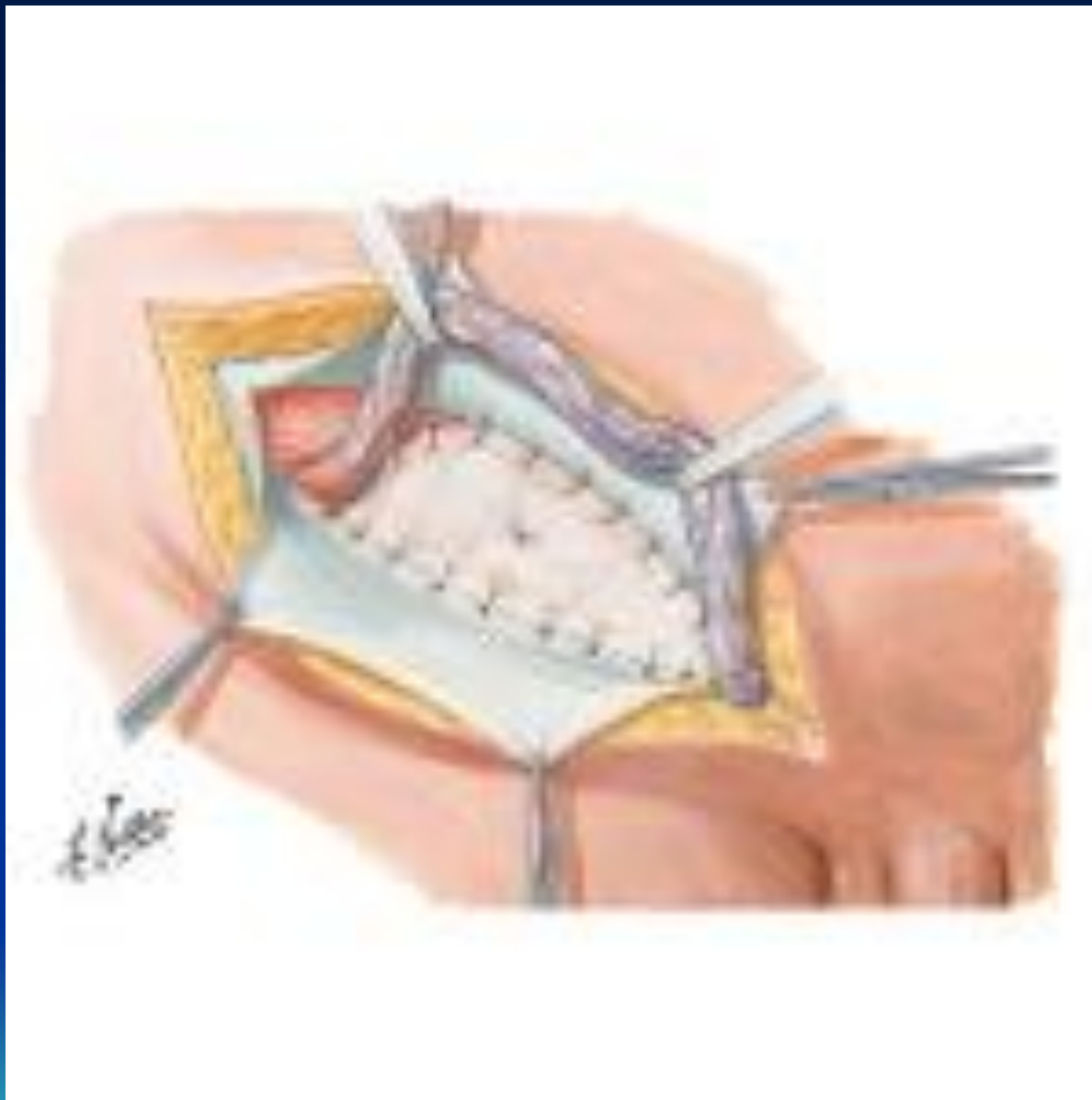


# Treatment of hernias:-

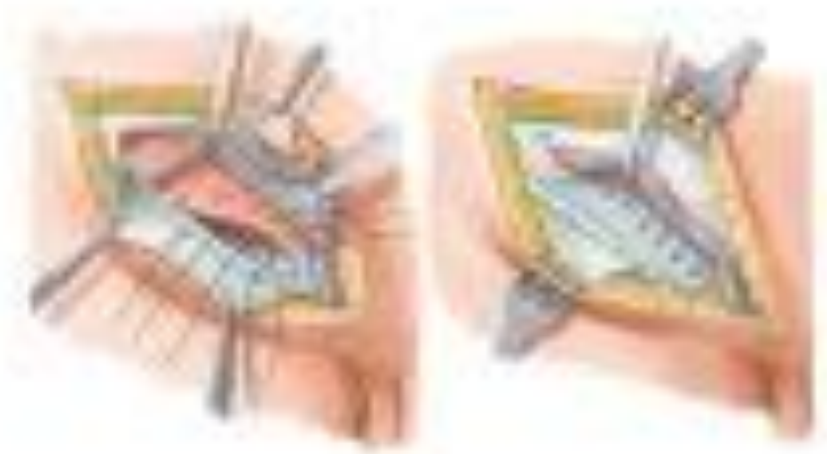
- 1- preoperative attention to smoking, weight reduction. •
- 2- Investigation and treatment of urinary outlet •  
obstruction or colonic obstruction before hernia repair.
- 3-Resuscitation for presenting with intestinal obstruction. •
- 4- In absence of systemic toxicity analgesics ice packs •  
and gentle manipulation may enable reduction of incarcerated hernia.
- 5- Principles of hernia repair •

**herniotomy** is identification of sac and contents: •  
mobilization of sac; reduction of contents; ligation of sac.

**Herniorrhaphy** is repair of fascial defect; different •  
methods used; healthy, strong fascial tissue must be opposed without undue tension. •



**Repair of Recurrent Hernia With Plastic**





## Post operative care fore patients after herniotomy

- 1- Ambulate patient in one day or two.
- 2- Measures for scrotal edema or swelling (daily weight)
- 3- Assess respiratory status
- 4- Keep the patient in semi-fowler's position
- 5-Monitor and record vital signs.
- 6- Avoid flexion at the waist in positioning the patient.



# The teaching goals for patients when discharge after herniotomy

- 1- exercise regularly
- 2- stop smoking
- 3- maintain a normal weight
- 4- eat small and frequent meals
- 5- stop drinking carbonated beverages and alcohol.
- 6- Stay upright for 2 hours after eating.
- 7- Avoid wearing constrictive clothing.
- 8- Avoid lifting, bending, straining, and coughing.
- 9- Athletics and extremes of exertion are not permitted for 6 to 8 weeks.

**Thank You**

