

Clinical significance:

X-ray

Dept. of Radiology and
Oncotherapy

dr. Katalin Kiss/ dr. Péter Magyar

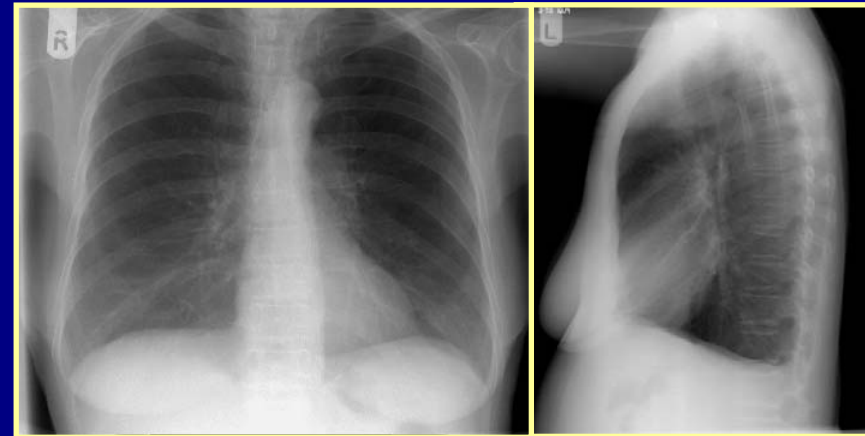


Indication of chest x-ray

- High fever
- Respiratory symptoms
- Physical disorder
- Primary tumor
- Traumatic injury
- Abdominal emergency
- Pre-, postoperative condition
- Chest screening

Method & strategy (chest)

- Zeiss/ Odelca
- 1:1 P-A CXR
- Sagittal view
- Fluoroscopy
- CT (CAT)
- Perfusion & ventill. lung scintigraphy
- Angiography, bronchography





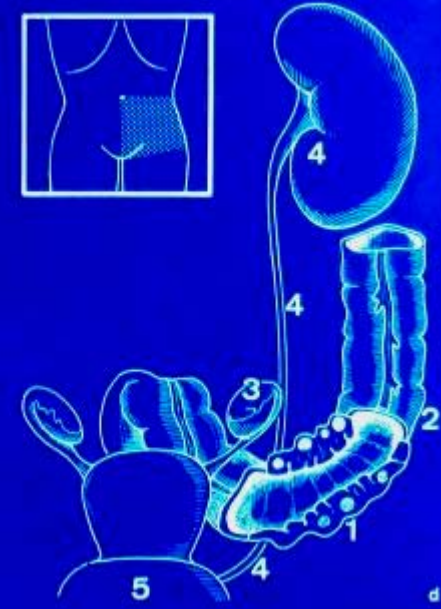
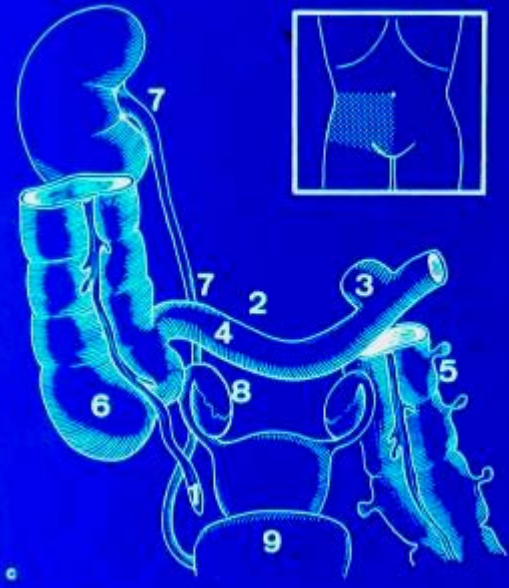
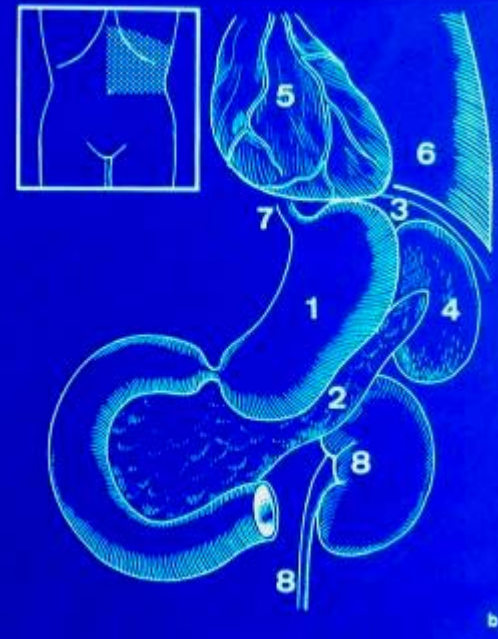
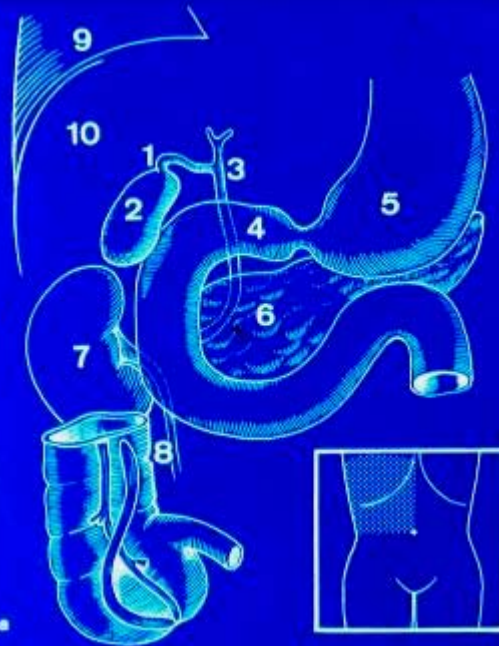




Indication of abd x-ray: abdominal emergency

- Perforation
- Ileus
- Crampy pain (gall-stone, renal stone)
- Inflammation
 - appendicitis
 - pancreatitis
 - diverticulitis
 - extrauterin gravidity
 - adnexitis
- mesenterial thrombo-embolism

PERITONITIS - PARALYTIC ILEUS



Method & strategy (abd)

- **CXR!!**
- Plain abdominal radiograph & fluoro
- Swallow examination
- Follow-through examination
- Barium enema study (urgent - monocontrast)
- US
- CT (CAT)

Free abdominal gas



Ileus

(small-, large bowel) mechanical obstruction

- Stenosis – stricture – obstruction
 - Congenital : atresia, stenosis, anal imperforation
 - Acquired
 - Inflammation
 - Tumors
 - Obstruction
 - Adhaesion
 - Strangulation
 - Hernia
 - Volvulus
 - Intussusception

Ileus

caused by inflammatory process

- Regional enteritis (Crohn's disease)
- Ulcerative colitis
- Diverticulitis
- Tuberculosis
- Actinomycosis

Ileus

caused obstruction

- Gall-stone
- Foreign body
- Helminthiasis
- Stercolith
- Tumor

Ileus

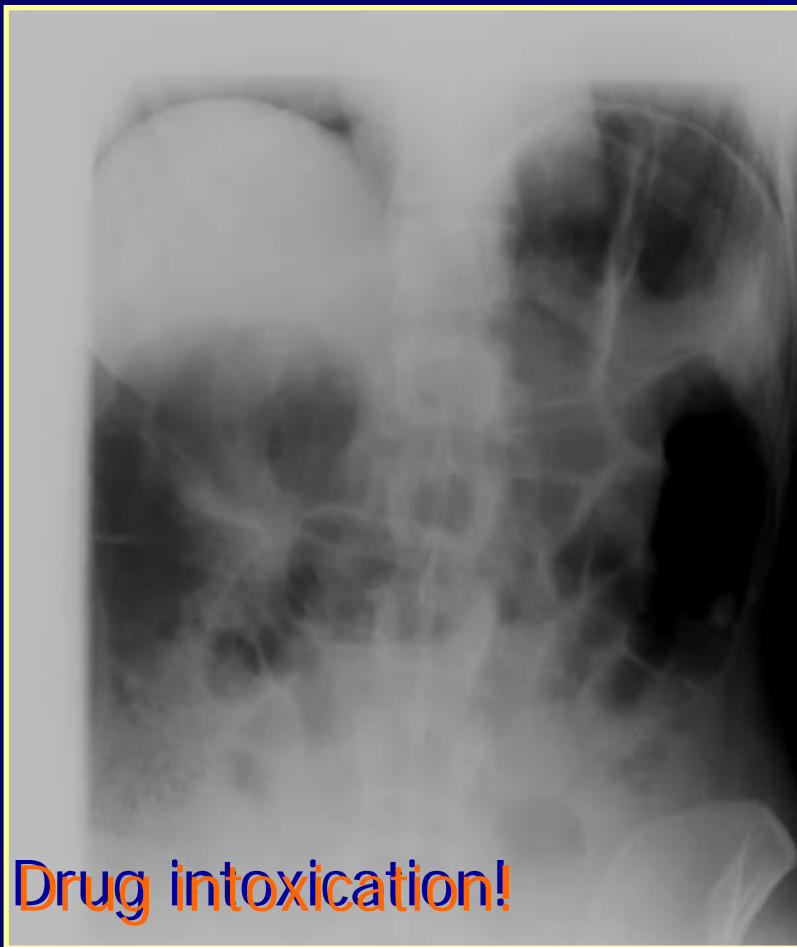
small bowel, mechanical obstructive



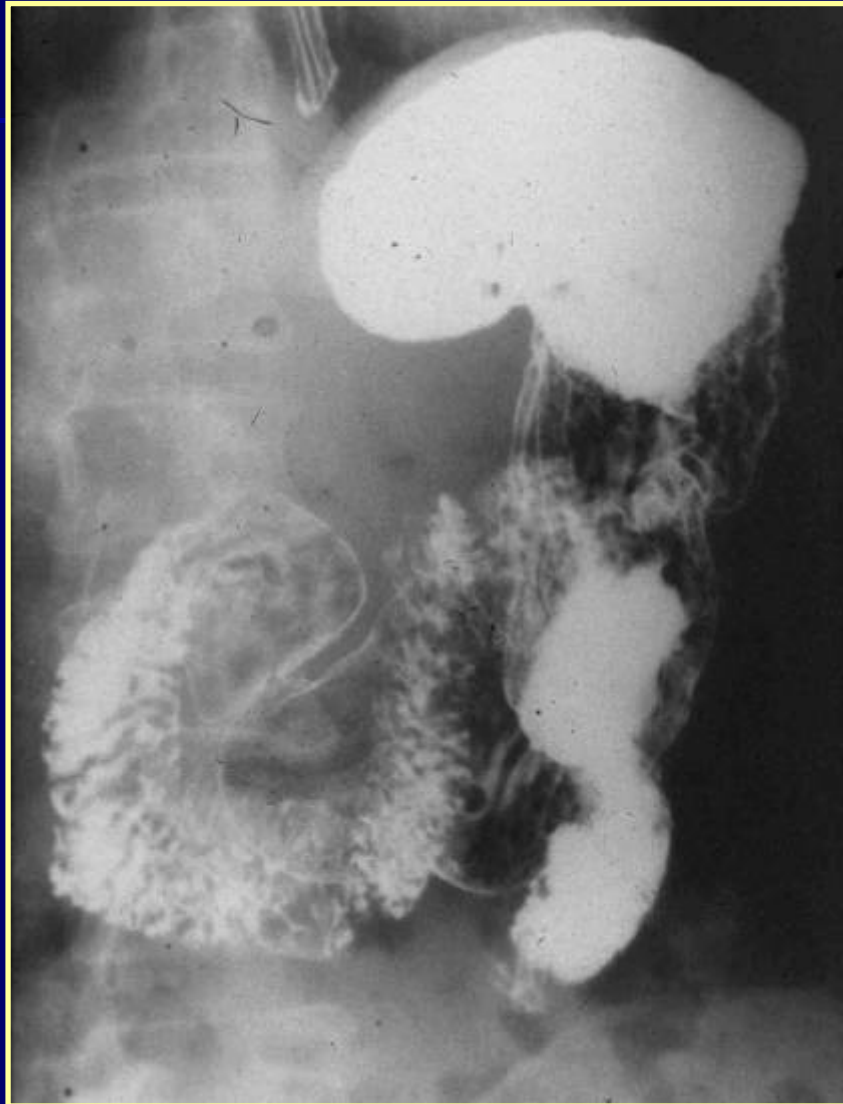
Large bowel ileus



Paralytic ileus



Stomach examination



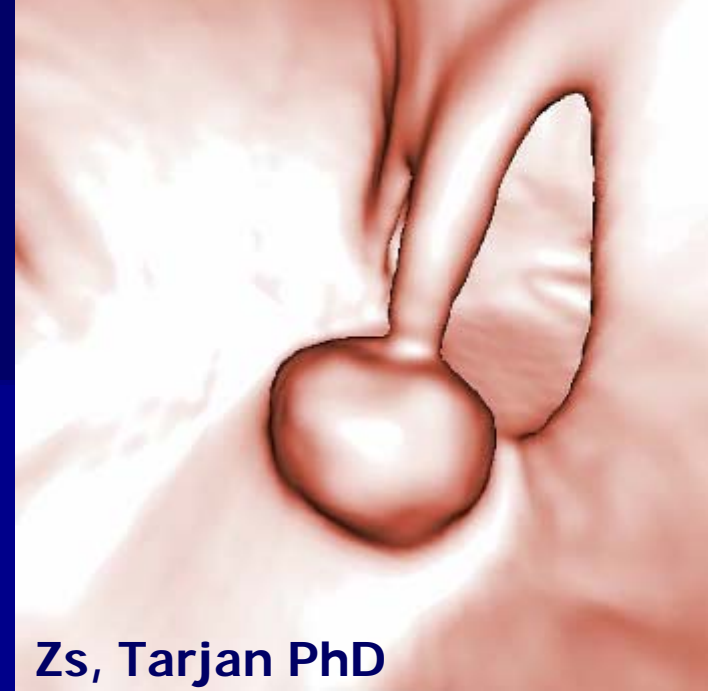
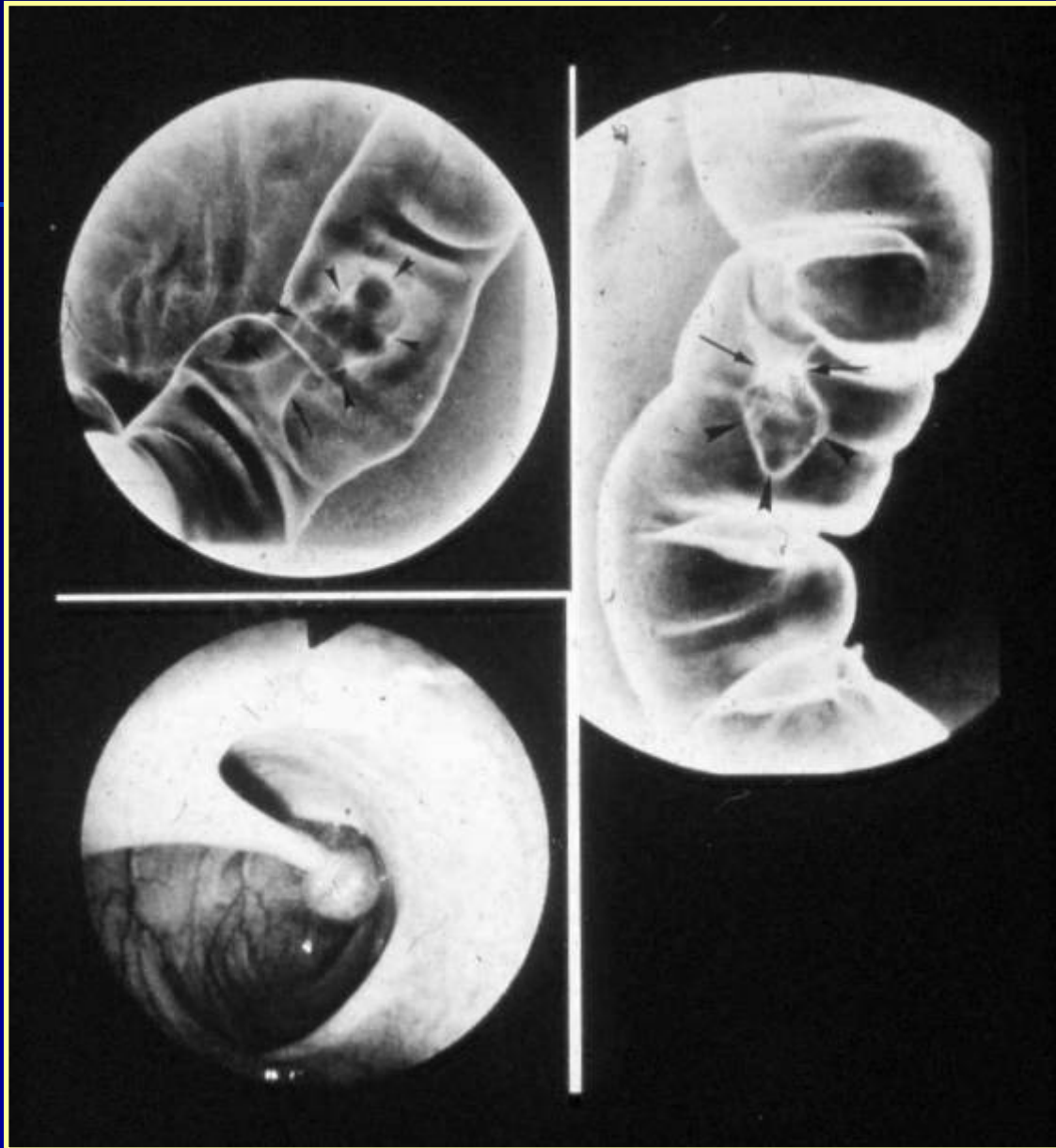
**Double
contrast**

Barium enema study



**Double
contrast**

Polyp



Zs, Tarjan PhD



Zs, Tarjan PhD

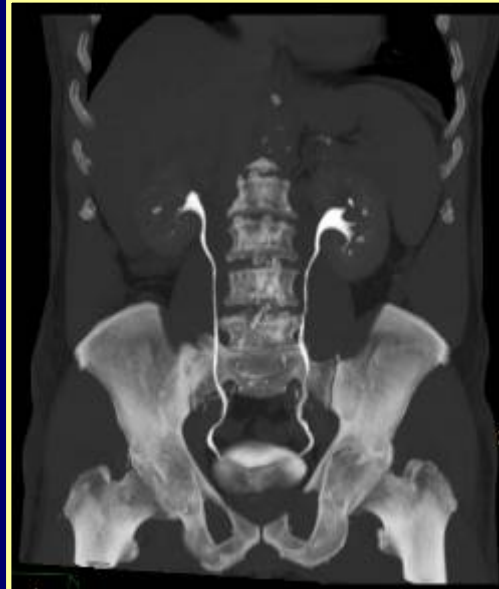
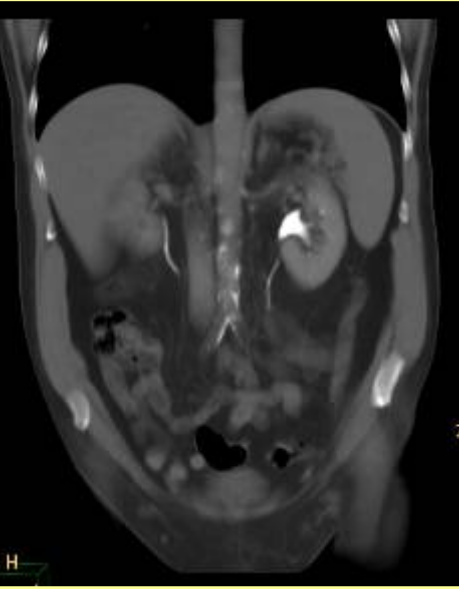
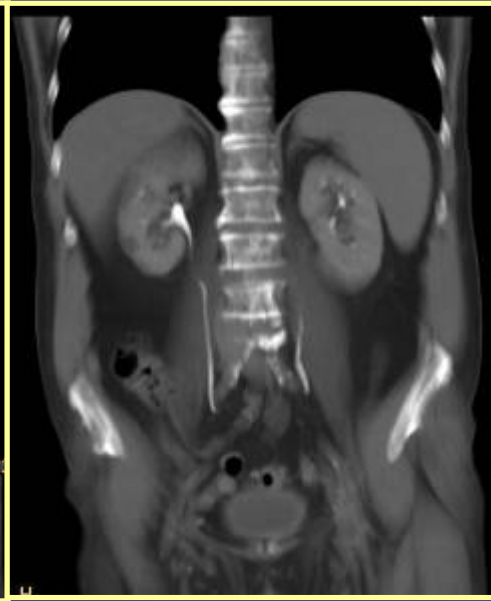
Colorectal cancer



Apple core
sign

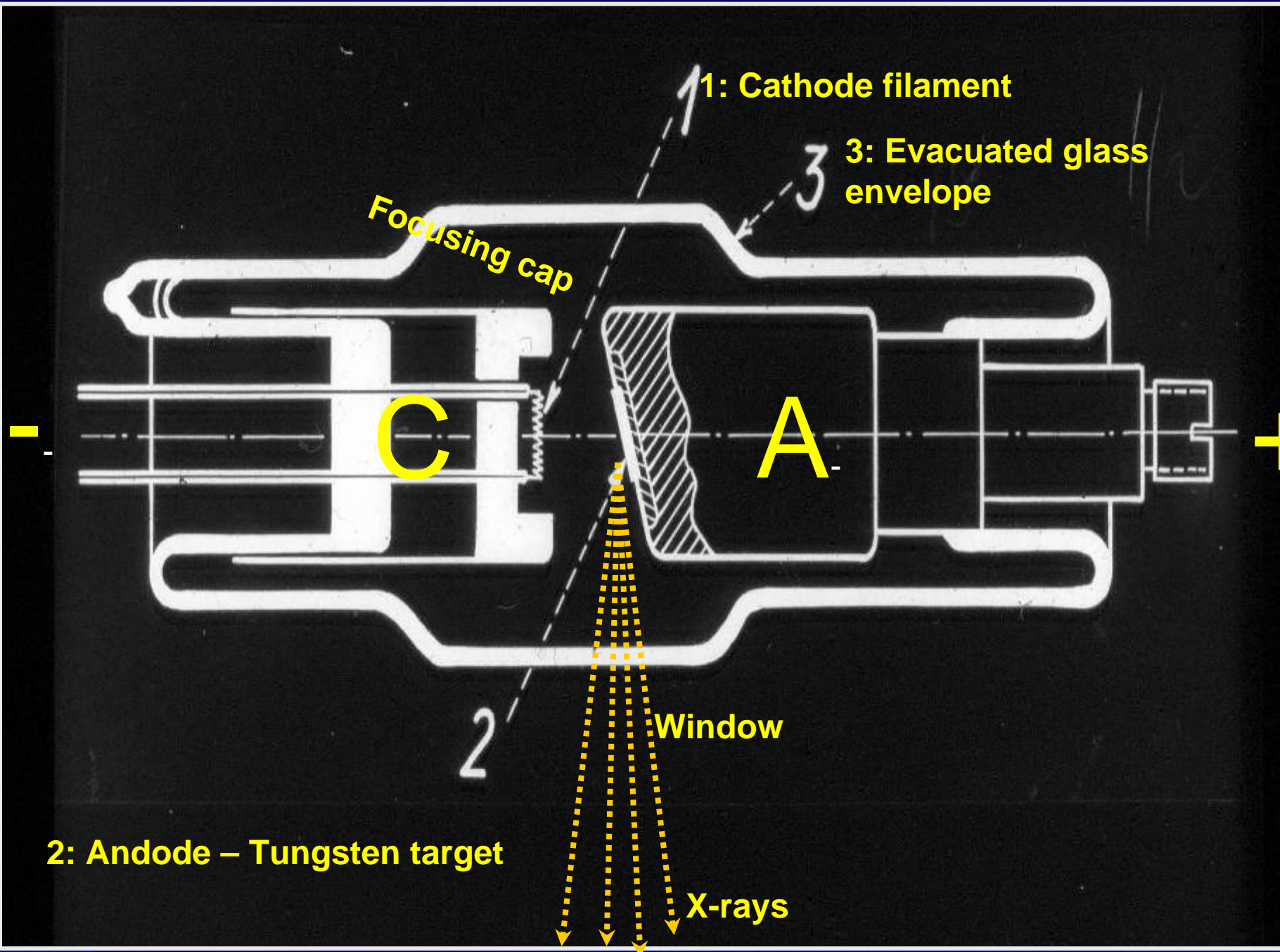


CT-pyelography \Leftrightarrow iv. pyelographia



Fracture





1: Cathode filament

3: Evacuated glass envelope

Focusing cap

C

A

2

Window

2: Anode – Tungsten target

X-rays