

OSCE

Revision Class

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FCPS

DEPT:OF SURGERY

Q#1. What does OSCE stands for?

- A) Objective Structured Clinical Examination
- B) Over Stimulation and Crying Event
- C) Opportunity for Showing your Competence and Excellence
- D) All
- E) None

What is OSCE?

The candidates rotate through a series of stations at which they are asked to carry out a various task(usually clinical)



OSCE includes several "stations"
examinees are expected to perform
specific
clinical tasks within a specified time
period .

students rotate through a series of
stations (as few as 2 or as many as 20).

TYPES OF OSCE STATIONS

Osce Stations

- 1.INTERACTIVE
- 2.STATIC
- 3. INTERSTATION or TAG STATION

INTERACTIVE STATIONS)

1. Monitored station, where An EXAMINER scores the student's performance,

Encounters:

patient history,
performing a physical examination
diagnostic procedure,
teaching/counseling/advising a patient.

A standardized checklist is used for marking of each station.

2. Interstation or tag station

here the student answers questions about the encounter

What is your differential diagnosis?

What investigations will you order?

What treatment will you advise?

3.STATIC STATIONS

are not observed

a student is asked to answer questions, about

- 1.Instruments
- 2.interpret findings such as lab reports
x-rays,
- 3.Clinical photographs(spot diagnosis)
- 4.Clinical Scenarios

Osce Stations

NO:16

- 1.INTERACTIVE -4.(1-
INTERSTATION or TAG)
- 2.STATIC-12

REST STATIONS

COMMON QUESTIONS ASKED IN OSCE

- INTERACTIVE STATIONS

INTRACTIVE-1

- Simulated Patient (Hx taking)

HISTORY TAKING STATIONS

- 1. Abdominal PAIN/MASS
 - -EPIGASTRIC
 - -HYPOCHONDRIAC REGION
 - -PERI-UMBILICAL /R I FOSSA
 -

HISTORY TAKING STATIONS

- 2.DYSPHAGIA
- 3.PAIN in the LOIN/FLANK
- 4.HEMATURIA
- 5.PAINFUL DEFECATION
- 6.BLEEDING P/R
- 7.HEMETEMESIS/MAELENA
- 8.INGUINO-SCROTAL SWELLING
- 9.BREAST LUMP
- 10.GOITRE
- 11.JAUNDICE(Surgical)

Station Profile

A) Instruction to students: .

Mr. Mohammed is a 22-year-old, presented with sudden pain in periumbilical region associated with nausea, vomiting and pyrexia for the last one day.

Station Profile (cont)

A) Instruction to students:(cont)

- You have 4 minutes to assess this patient, by taking the proper and relevant history
- An observer, using a **checklist**, will assess your performance while you interact with the patient
- No questions will be asked by the examiner

Checklist

- Student greeted the patient
- Introduced her/himself
- Asked the patient's name
- Site of pain/
- Onset
- Duration of pain
- Nature of pain

Checklist

Radiation/Referral

Aggravating/Alleviating factors

Associated features

Change in appetite

Fever –type

Bowel functions

INTERACTIVE-2

(Tag Station)

Here the student answers questions about the encounter on Interactive-1.

1. What is your differential diagnosis?
2. What investigations will you order?
3. What treatment will you advise?

INTERACTIVE-3&4

CLINICAL EXAMINATION

CLINICAL EXAMINATION

- 1.Exam of a SWELLING
- 2.Exam of ABDOMEN
- 3.Exam of THYROID
- 4.Exam of PAROTID
- 5.Exam of an ULCER
- 6.Exam of a BREAST LUMP
- 7.Exam of VARICOSE VEINS
- 8.Exam of INGUINAL HERNIA
- 9.Exam of SCROTUM

Station Profile

A) Instruction to students: .

Mr.Mohammed is a 22-year-old, presented with this Lump(Swelling) in NECK,BACK,SCALP,FACE etc

Station Profile (cont)

A) Instruction to students:(cont)

- You have 4 minutes to examine this patient,
- An observer, using a checklist, will assess your performance while you examine the patient

Check list; Examination of a Lump

Introduce self & consent

- Position
- Colour and texture of overlying skin
- Temperature
- Tenderness
- Shape
- Size
- Surface
- Edge
- Hardness
- Fluctuance
- Fluid thrill
- Translucency
- Resonance
- Pulsatility
- Compressibility
- Reducibility
- Mobility

A FEW QUESTIONS

- What are your findings
- What is your diagnosis?
- D/D
- Investigation
- Treatment

BREAST EXAMINATION

- Introduction and Consent
- Inspection
 - With the patient sitting
 - With the patient leaning forward
 - Arms above head
 - Push hands into hips

BREAST EXAMINATION

- Palpation
 - Start with the normal breast
 - Arm behind head
 - All 4 quadrants
 - Axillary tail
- Examine lymph nodes
 - Axillary
 - Cervical

A few questions...

- What is meant by triple assessment?
 - Clinical examination
 - Imaging – mammography and ultrasound
 - Cytology
- What is the difference between cytology and histology?
- What are the risk factors for breast cancer?
 - What is MRM? What are the risk factors for breast cancer?

OSCE SPOTTER STATION

Spotters

- PAROTID LUMP
- Jaundiced patient
- Stomas
- Cervical lymphadenopathy
- Lipoma
- Sebaceous cyst
- TG cyst
- Hemorrhoid/fistula/fissure/perianal abscess
- Varicose veins
- Multinodular goitre
- Diabetic foot
- Ulcer-bedsore
- Basal cell cancer –face
- Gangrene foot/toes
- Tongue ulcer/Ranula
- Abdominal trauma-liver/spleen/intestine
- Appendix/Meckel`s diverticulum
- Ing:Hernia/Hydrocele

LOOK at this picture and answer the following question:

- 1.what is your diagnosis?
- 2.justify
- 3.what is the underlying pathology?
- 4.Name 2or 3 investigations
- 4.list 3 complications.
- 5.mention treatment options.

Ostomy

Not painful

Always red and moist

Rose Red Bud

- Show a normal stoma



Loop Colostomy



Stomas Continued

- **Complications**

- **Early**

- Haemorrhage
 - Stoma Ischaemia
 - High Output
 - Obstruction (adhesions)
 - Stoma retraction

- **Delayed**

- Dermatitis,
 - Stoma Prolapsed
 - Parastomal hernia
 - Fistulae
 - Obstruction

Types of stoma

- Temporary
- Permanent
- End
- loop
- **Counselling**
- How to manage stomas
- Stoma site avoided:
 - Bony areas, umbilicus, scars, waistline skin fold & creases

Look at this operative photograph



QUESTIONS

- Identify this organ
- What is your diagnosis
- List 3-4 clinical features
- What complications occur if treatment is delayed

Dental 9



LOOK at this picture and answer the following question:

- 1.what is your diagnosis
- 2.what is the underlying pathology?
- 3.list 3 complications.
- 4.mention treatment options.









Scar

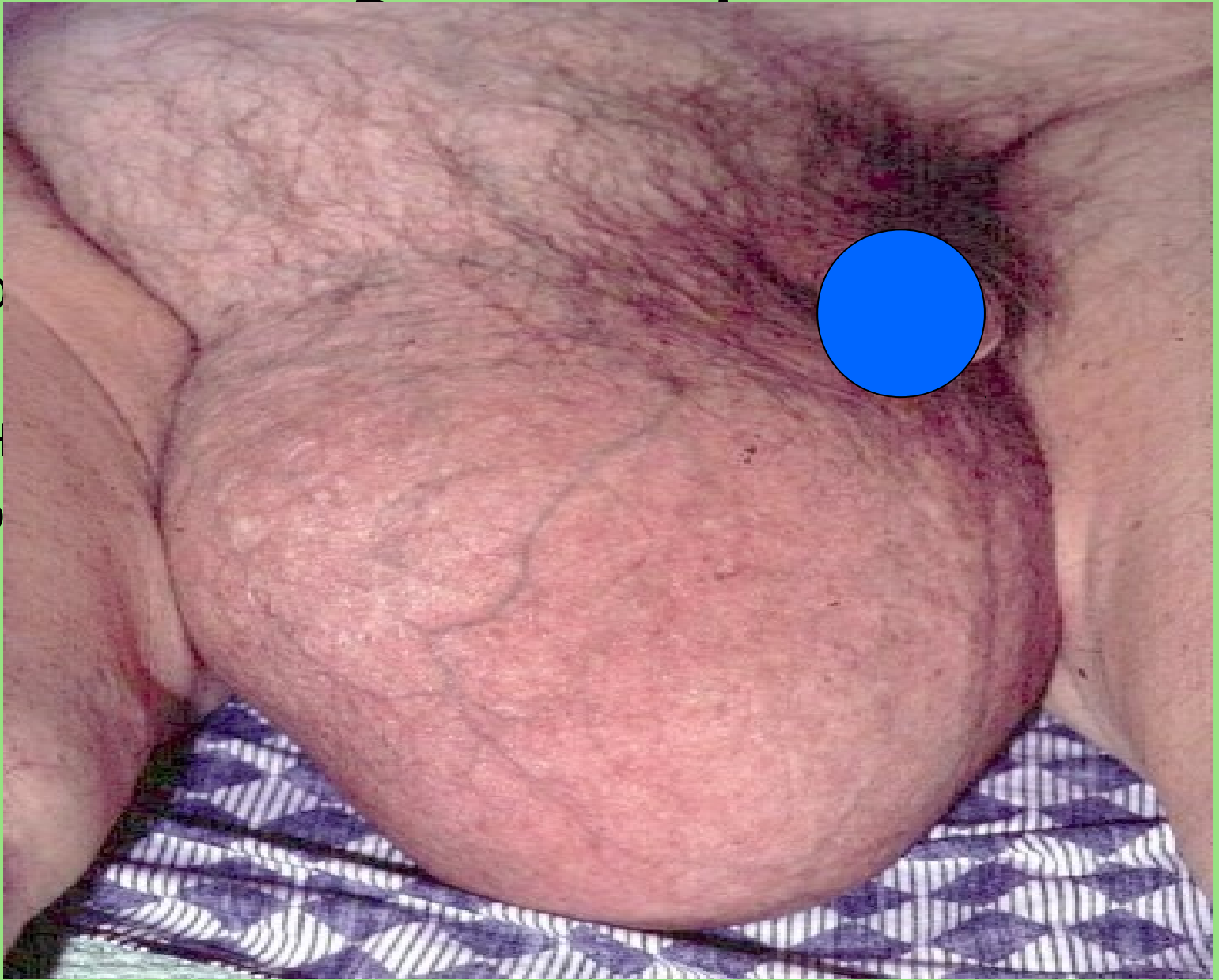


Figure 2

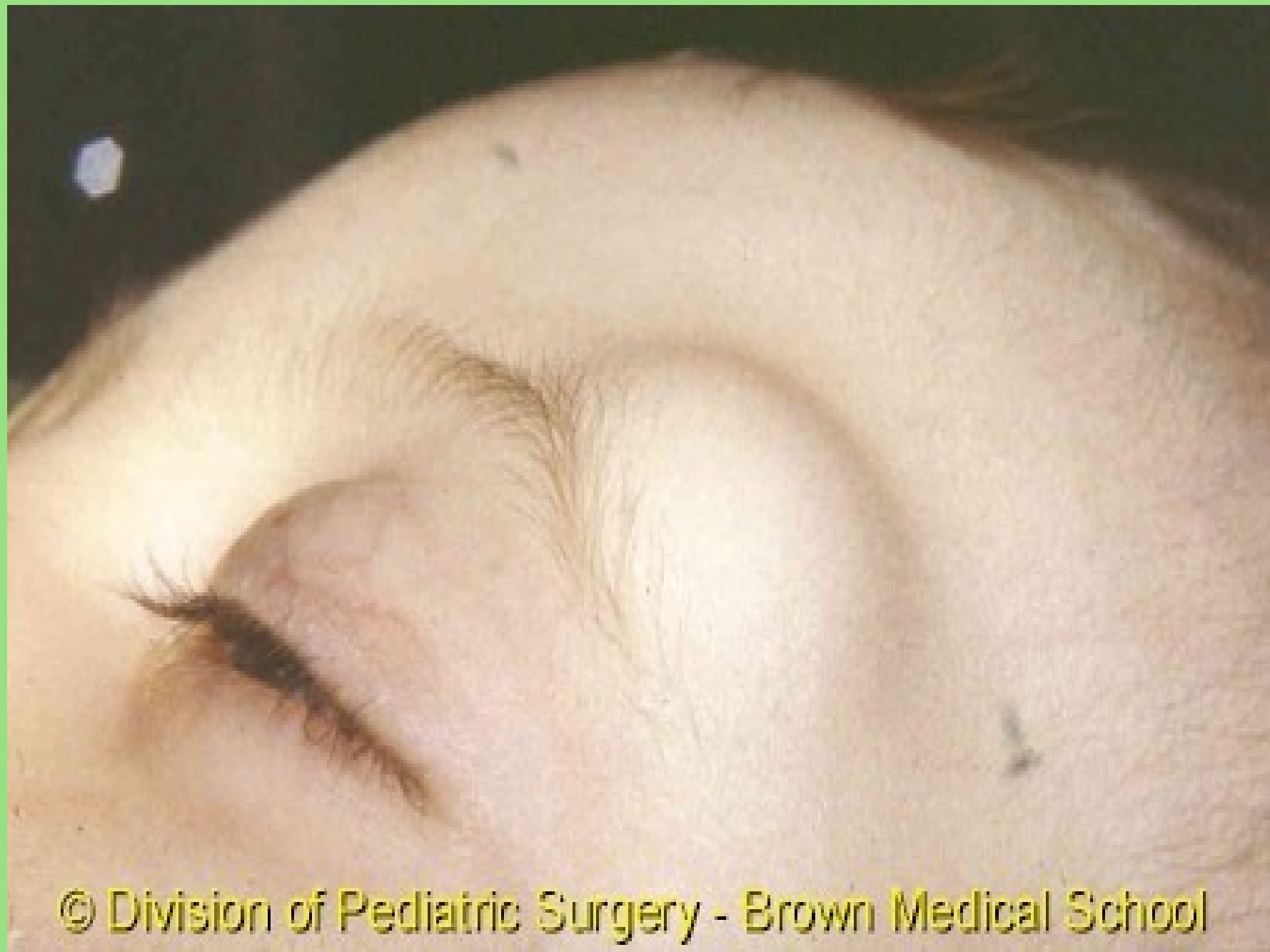
**Parotid lump –
pleomorphic
adenoma**



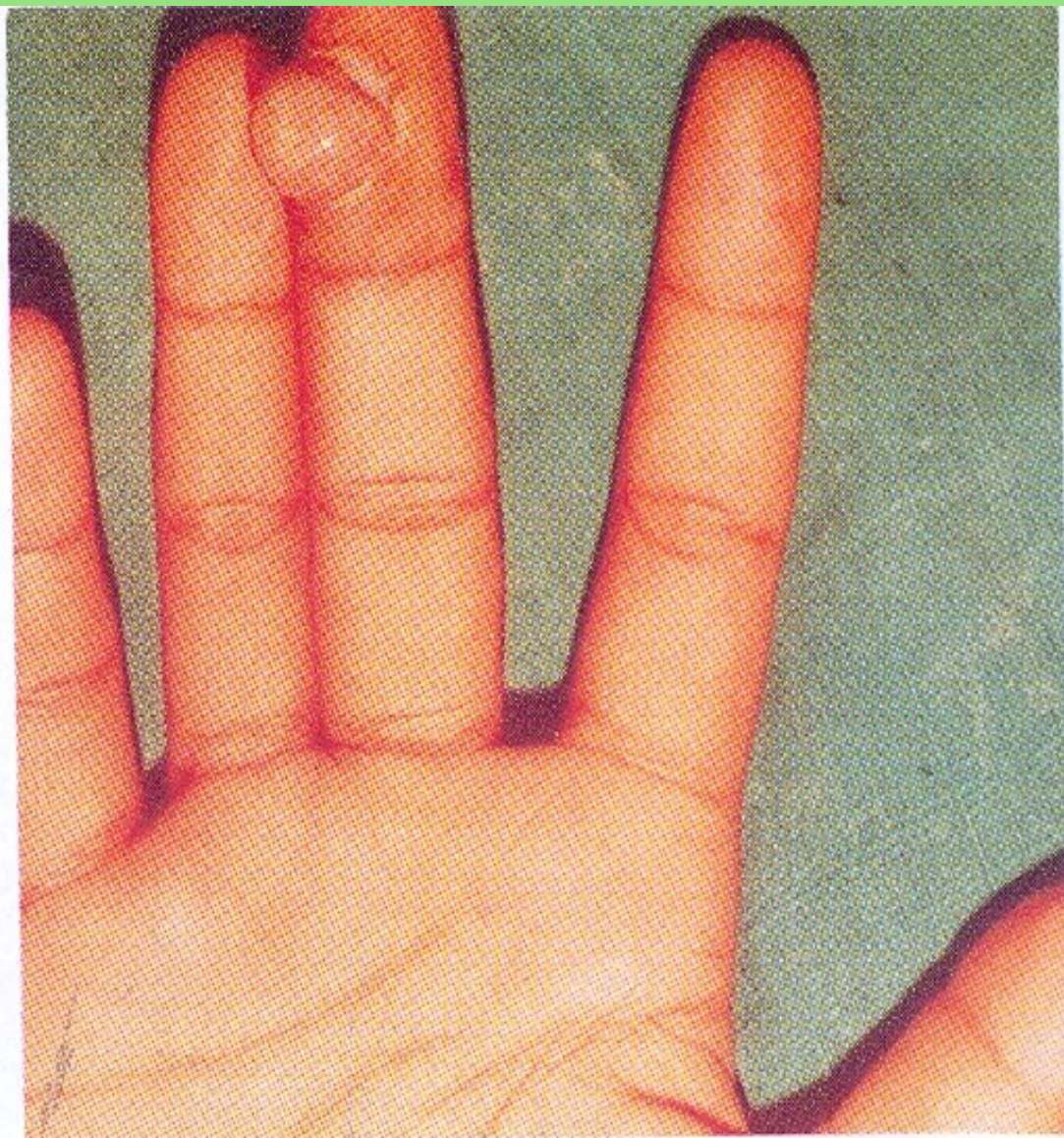
- S
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- p





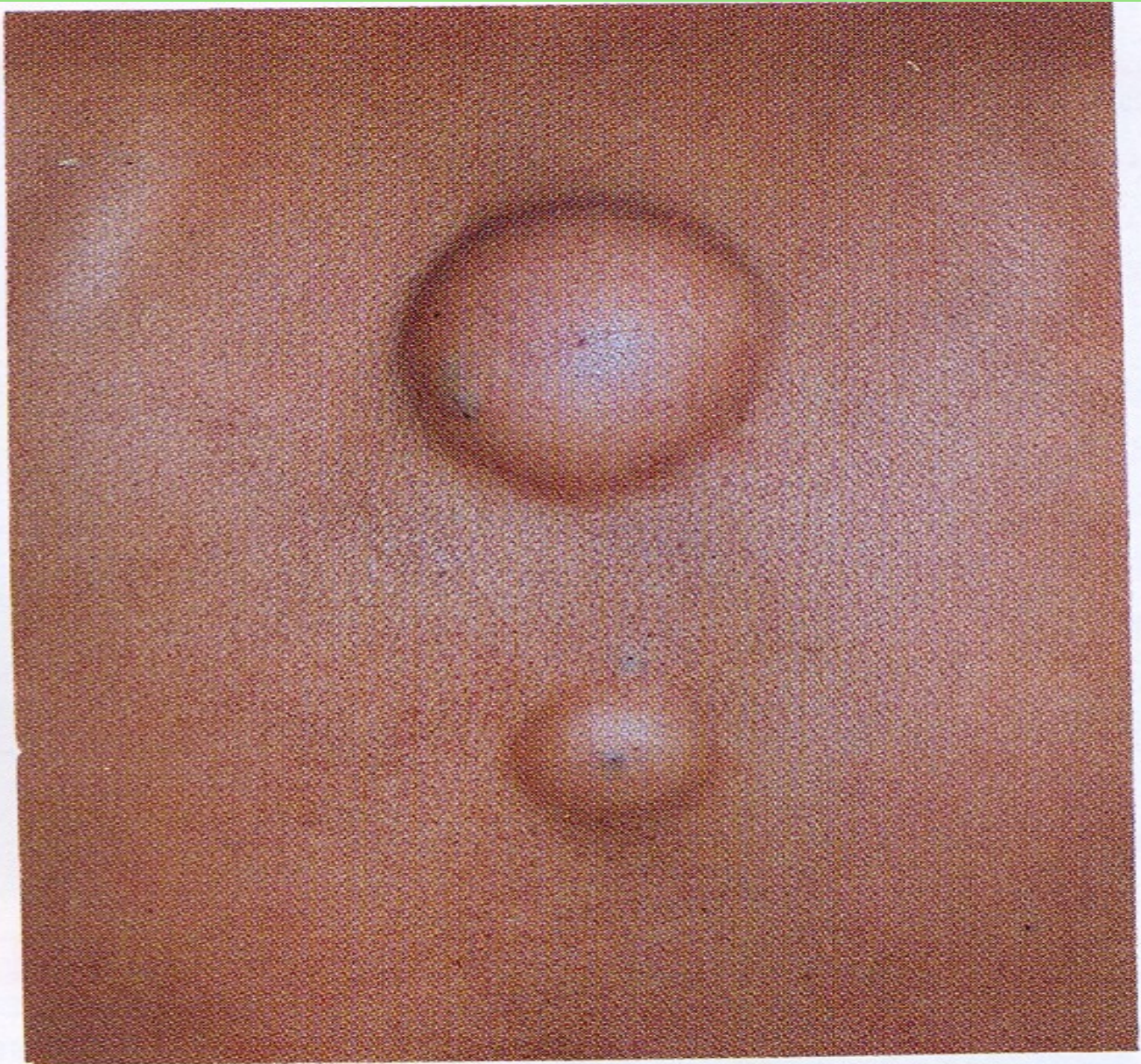


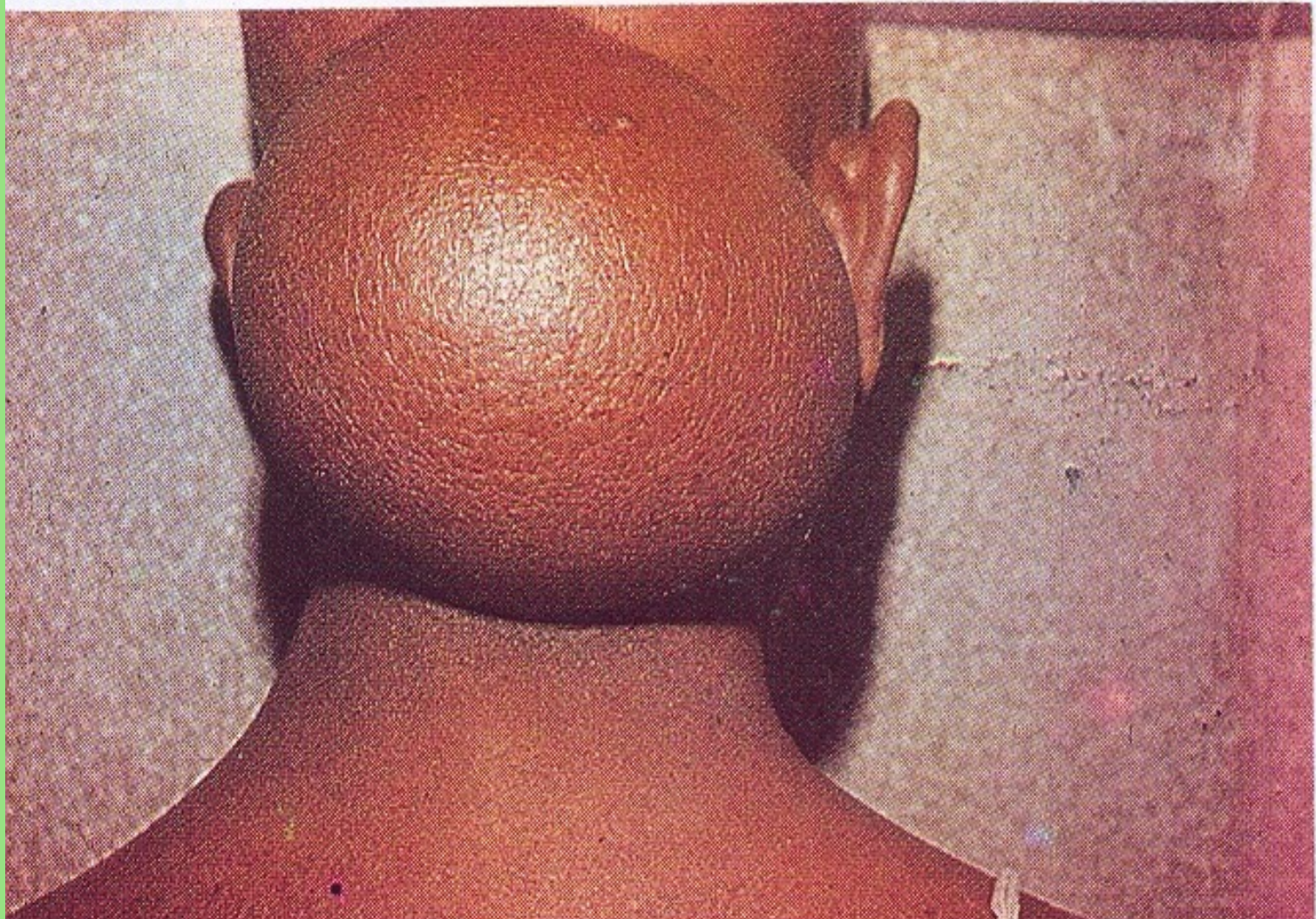
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Primary squamous cell









CASE SCENARIOS



QUESTIONS

- 1.What is this lesion.
- 2.Name the commonest causes of this lesion in lower leg.
- 3.What are the different parts of this lesion?
- 4.How will you treat this lesion?

CASE 1.

A 28-year-old man presents to the emergency department complaining of anal and lower-back pain for the previous 36 h..

The pain is progressively getting worse and he is uncomfortable to walk or sit down.

Examination

Inspection of the anus reveals a 3cm 3 cm swelling at the anal margin. The swelling is warm, exquisitely tender



Questions

- What is the diagnosis?
- What are the aetiological factors associated with this condition?
- How are these lesions anatomically classified?
- What treatment is required

AETIOLOGY

.in 90% of cases the abscess commences as an infection of an anal gland.

classification of the perianal abscess:

- Perianal
- Ischioirectal
- High intersphincteric
 - Submucous
 - Pelvirectal.

Treatment

1. Incision and drainage may be done under local anesthesia. packing to keep skin edges open.
2. Antibiotics .

Case Scenario I

- 32 years old male, complaining of painless bleeding per rectum and a palpable lump while abluting. Pt sometimes has mucus discharge and pruritis.



Scenario I

- What is your provisional Diagnosis?
- What are the investigations you need and why?
- Mention 4 complication in such pt?

CASE SCENARIO

A 60 years old man, presented to the surgical OPD, complaining of left sided loin pain, associated with occasional hematuria.

on examination his left kidney is palpable and U/S shows is mass in the upper pole left kidney,

Questions:

Q.#.1 What is your differential diagnosis?

.

Q.#.2 What investigation is now required?

.

Q.#.3 Name often relevant investigations for planning management.

.

Q.#.4 Mention treatment options.

.

**Q.#.1. Renal Cancer
Renal calculus
Hydonephrosis/Pyonephrosis**

**Q.#.2. 1. CT Scan (Contrast)
2. MRI**

**Q.#.3. 1. Blood CP
2. Lft
3. X-Ray Chest
4. CT Scan Cheat
5. Renal Angiography
6. I/V cavogram
7. PET Scan
8. Bone Scan**

**Q.#.4. 1. Minimal Invasive procedure
 • NSS
 • RFA
 • Themal ablaTION
1. Surgery
 • Radical Nephrectomy
1. CHTH
2. RT
3. Throsine Knain Inlututor (TKI)
4. Inter feron/Interleukin**

CASE

50 years male with mass epigastrium moving with respiration, associated with vomiting, wt loss for two months .

O/E : Left supraclavicular node palpable

A Ba-meal –Ray is ordered which is shown below



Questions

Q#1. Mention the finding on X-ray

Q.#.2 What is your likely diagnosis?

.

Q.#.3 Which investigations is needed to confirm diagnosis?

.

Q.#.4 Name any 3 investigations to stage the disease.

.

List treatment options

Q#5.

ANSWERS

Q#1. Apple core appearance-body of stomach

Q.#.2. Cancer of Stomach

Q.#.3. Endoscopy/ Biopsy

Q.#.4 1.CT SCAN 2.EUS 3.PET SCAN 4.Stagging

Q#5. Laparoscopy

1.Surgery-Gastrectomy(subtotal/total)

Palliative gastrojejunostomy

Lymphadenectomy.

2.Radiotherapy

3.aAdjuvant Chemotherapy

SCENARIO

A 62 year-old woman with chief complain of neck mass.

Physical exam reveals a thyroid nodule, 2*2*2 cm.

Clinically she is Euthyroid.



Keys:

Questions:

Q.#.1. What is your diagnosis.

Q.#.2. Name any 3 causes of this lesion.

Q.#.3. Mention any 3 signs which suggest malignancy.

Q#4. List any 3 investigation which will help in diagnosis of this lesion.

Keys:

Q.#.1. Solitary Thyroid nodule

Q.#.2. 1.Thyroid cyst
2.Thyroid Adenoma
3.Thyroid cancer

Q.#.3. 1,Firm to hard nodule
2,Fixed nodule

3.Rapid increase in size

4. local invasion

-Vocal cord paralysis

-Dysphagia

5.Cervical Lymphadenopathy

1.T3,TSH 2. Thyroid scan

3. FNA

4. Thyroid uptake of I-131

5. Ultrasound



INTERPRETING ABDOMINAL RADIOGRAPHS

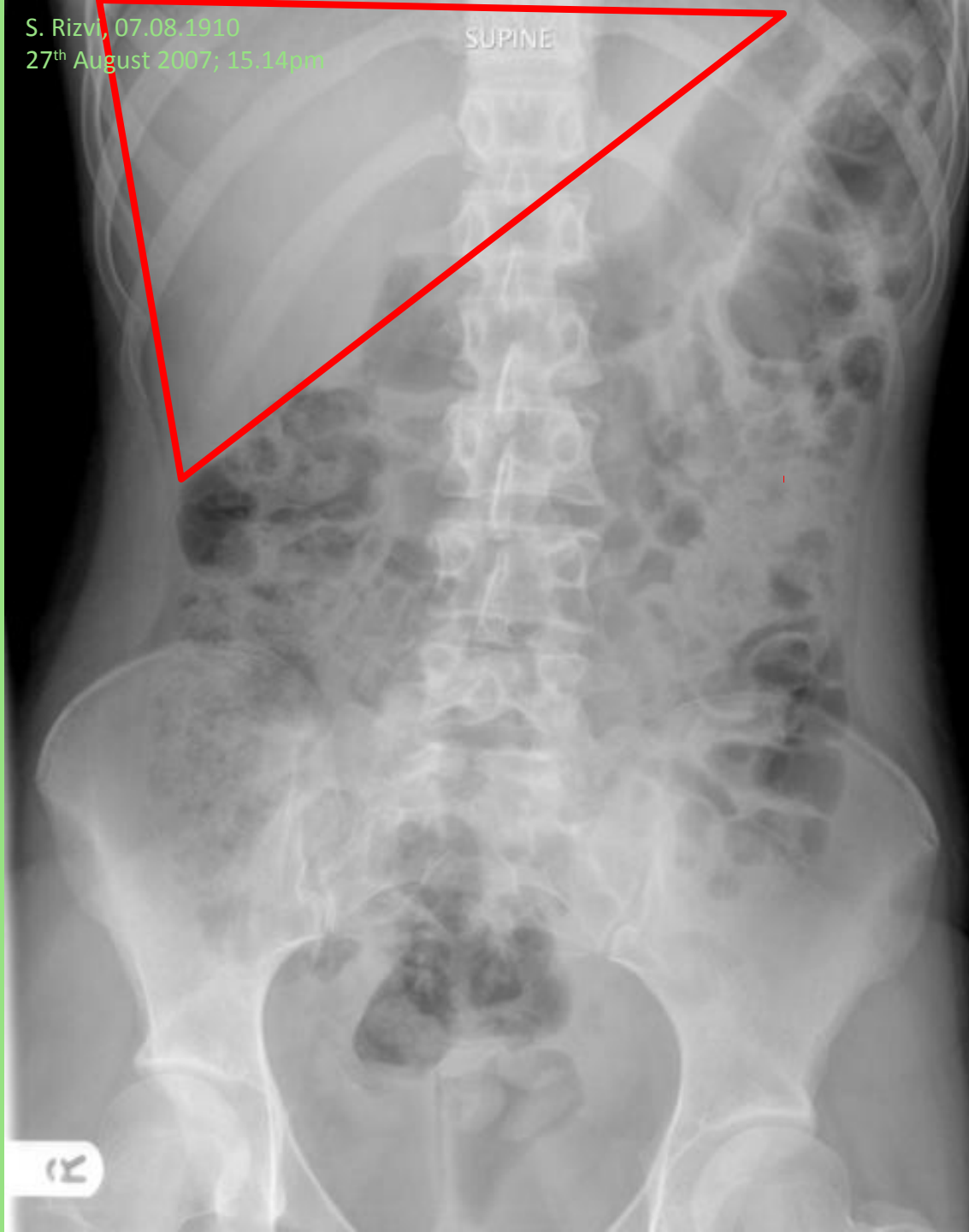
Some common X-rays

AXRs

- 1. PNEUMOPERITONEUM
- 2. INTESTINAL OBSTRUCTION
- 3. APPENDICOLITH
- 4. GALL STONES

S. Rizvi, 07.08.1910
27th August 2007; 15.14pm

SUPINE



Note the absence of bowel gas in the right upper quadrant due to the presence of the liver

Biliary tree



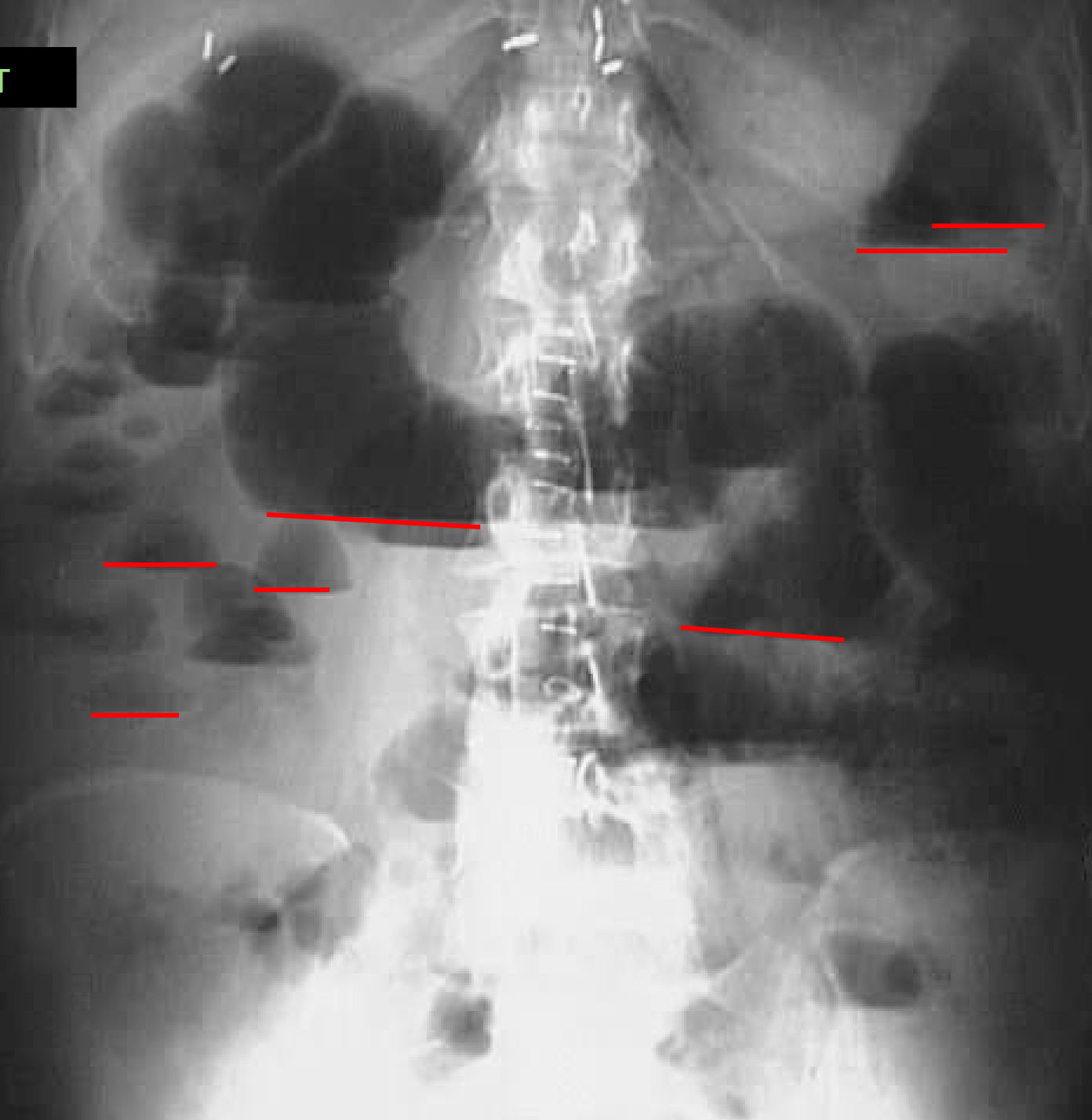
Multiple
gallstones

Only 10% of
gallstones are
visible on plain
film

PLAIN ABDO X RAY



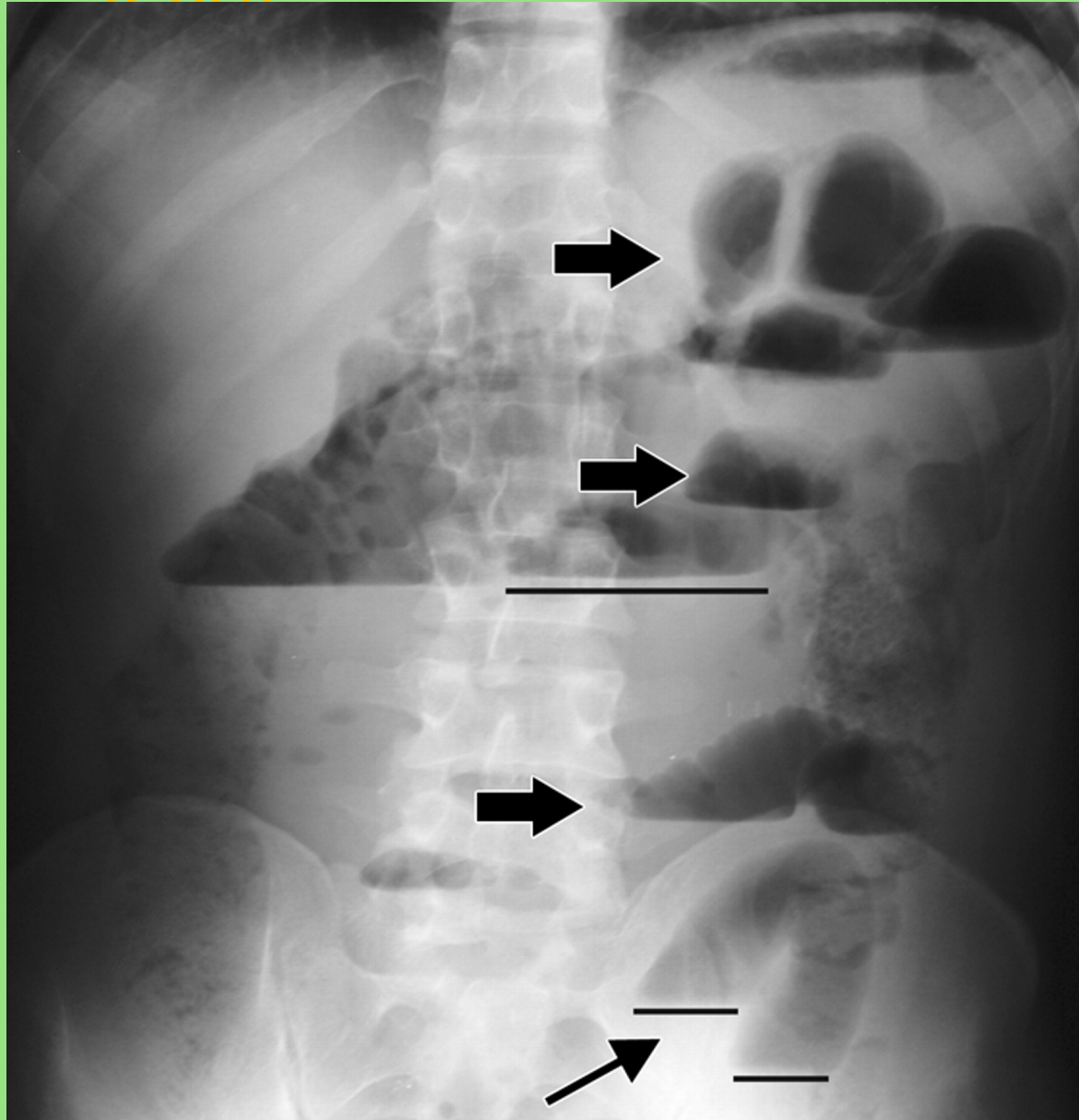
ERECT



Note the multiple fluid levels

X-RAY

- Small Bowel Obstruction is suggested by a “ladder” pattern, when obstruction occurs, both fluid and gas collect in the intestine.
- They produce a characteristic pattern called *air-fluid levels*. The air rises above the fluid and there is a flat surface at the air-fluid interface.





COLON OBSTRUCTION

Distension extends to
distal descending colon.

SBO Vs LBO

Large bowel

Peripherally placed dilated bowel

Haustra (do not cross whole diameter of colon; no more than 1/3 of the way across)

Few loops

Small bowel

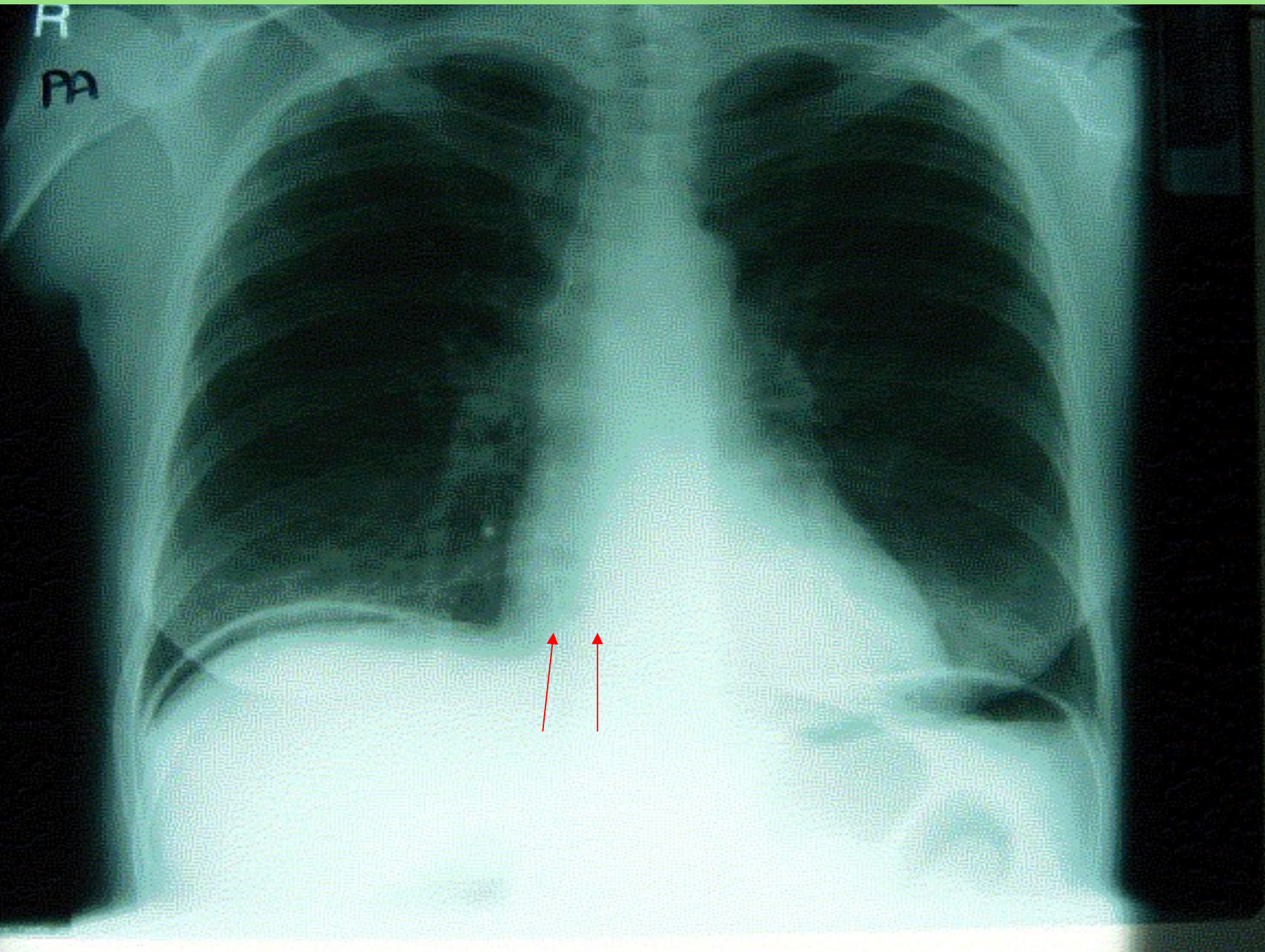
Centrally placed loops dilated bowel

Valvulae conniventes extend across whole bowel lumen

Many loops

Extra-luminal gas seen erect CXR.





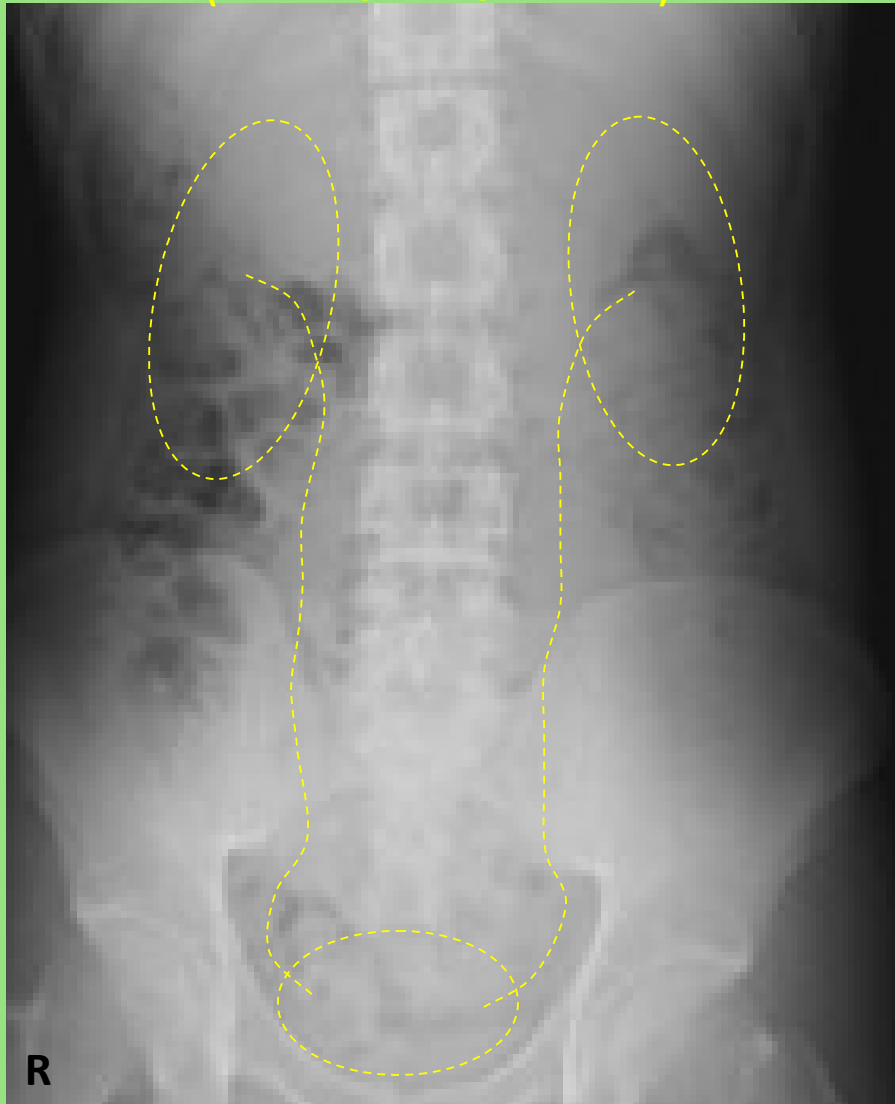
KUB X-RAYs

- 1. RENAL CALCULUS
- 2. URETERIC CALCULUS
- 3. VESICAL CALCULUS



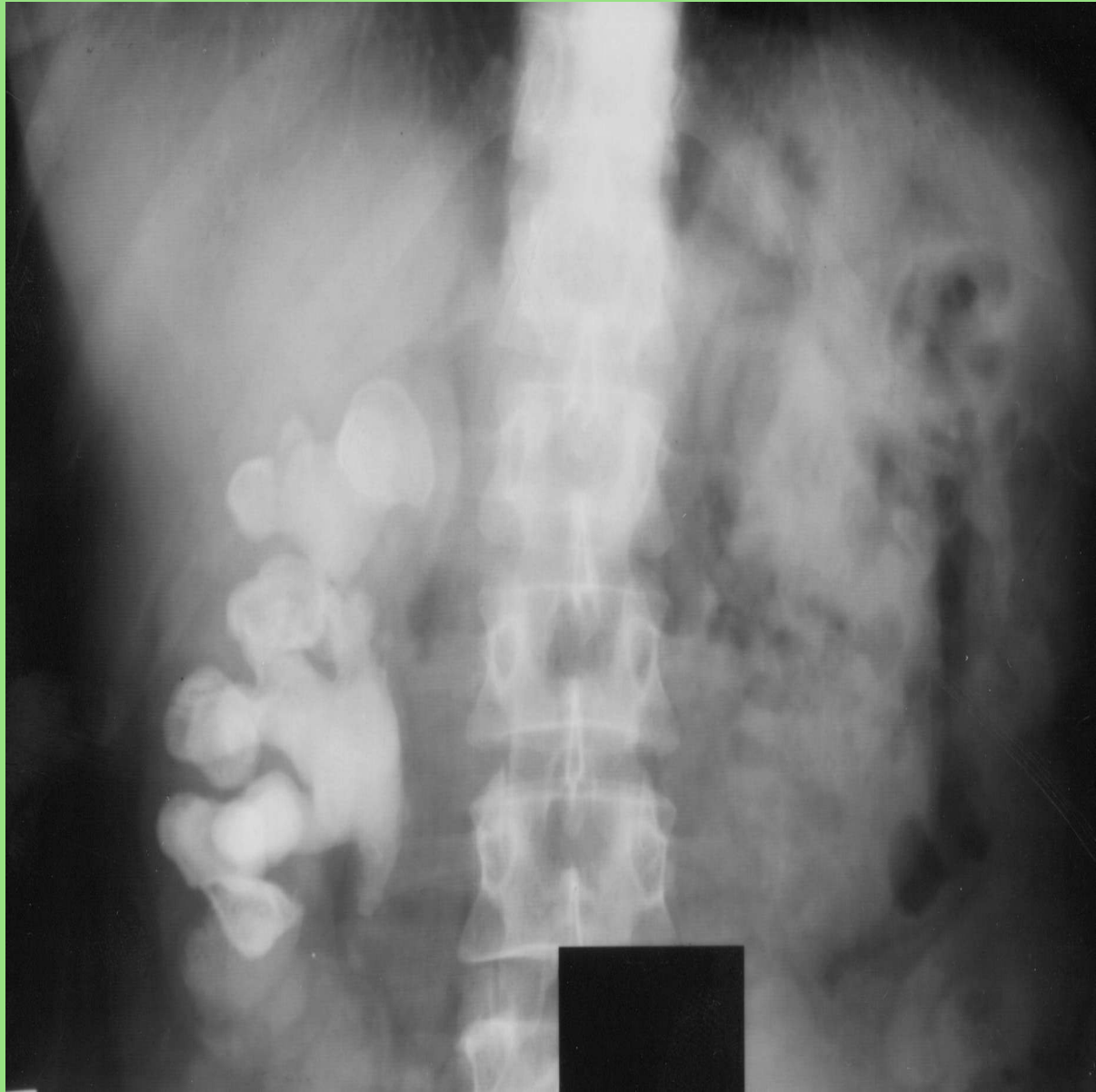
KUB

(KIDNEY- URETERS- BLADDER)



THE KUB IS USED AS A SCOUT FILM FOR MANY ABDOMINAL IMAGING STUDIES











Bladder Calculus

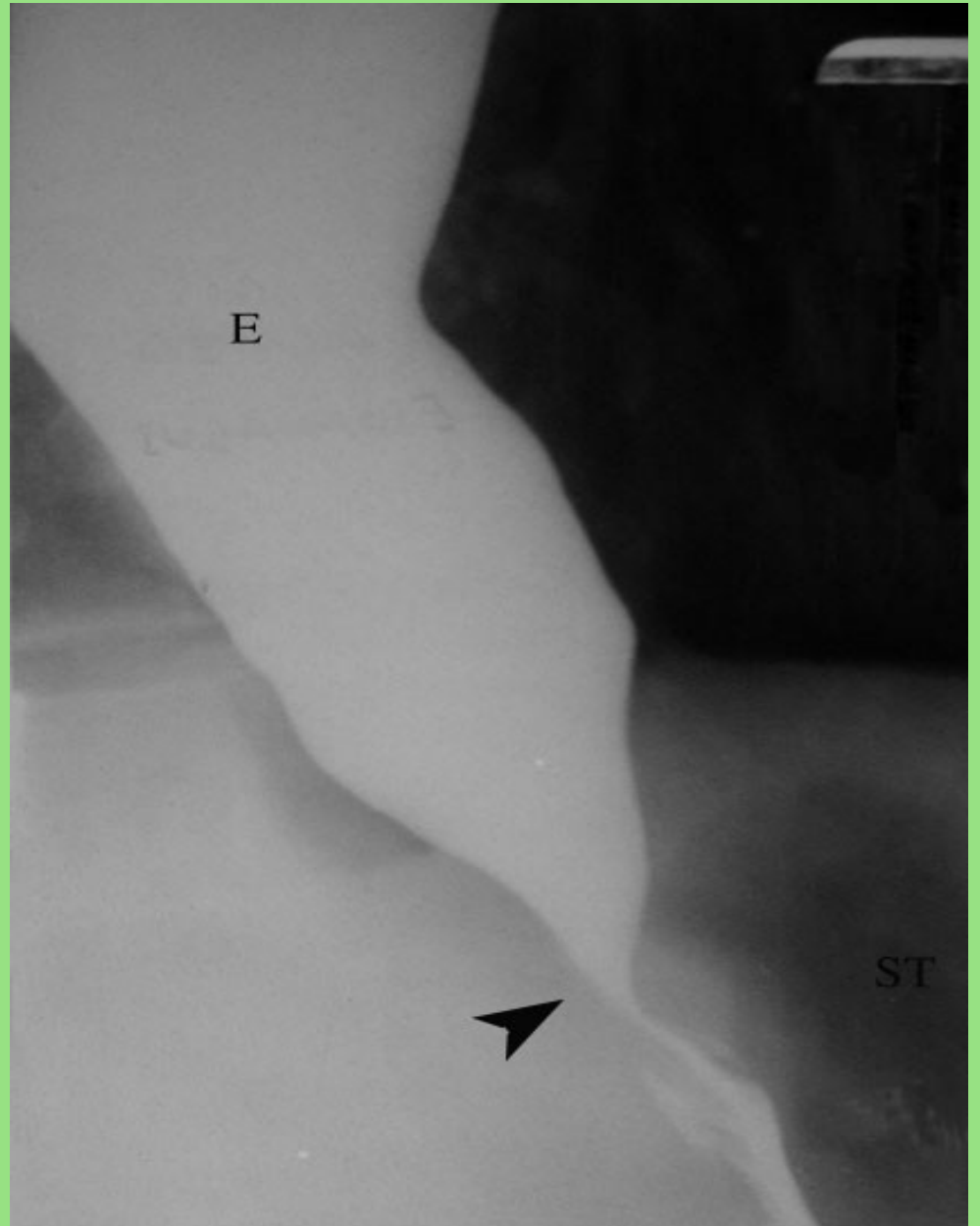
A large calculus shown in the bladder.



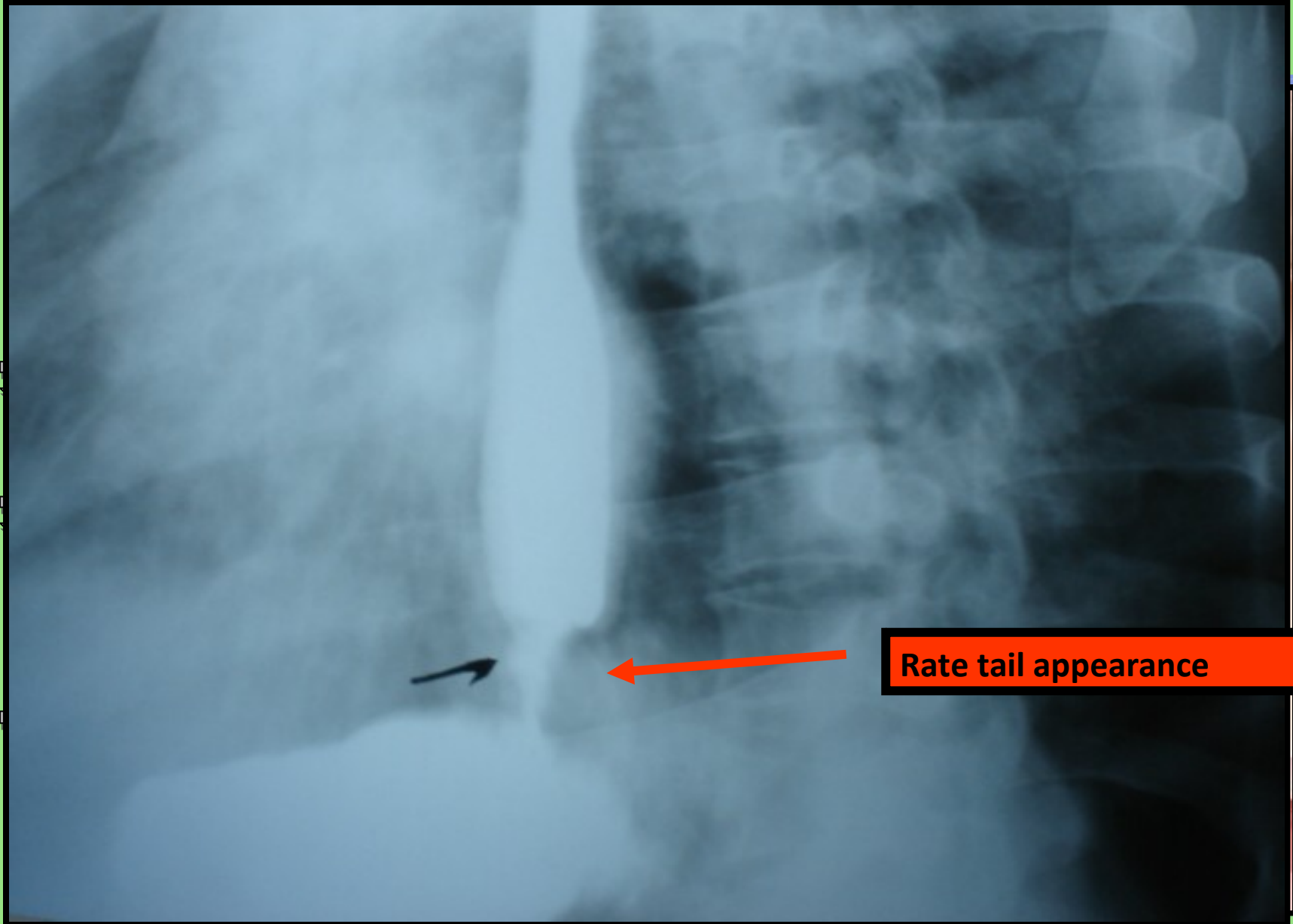
CONTRAST X-RAYs of GIT

- 1.BARIUM SWALLOW X-RAY
- 2.BARIUM MEAL X-RAY
- 3.BARIUM ENEMA X-RAY
- 4.CHOLANGIOGRAM

ACHALASIA CARDIA



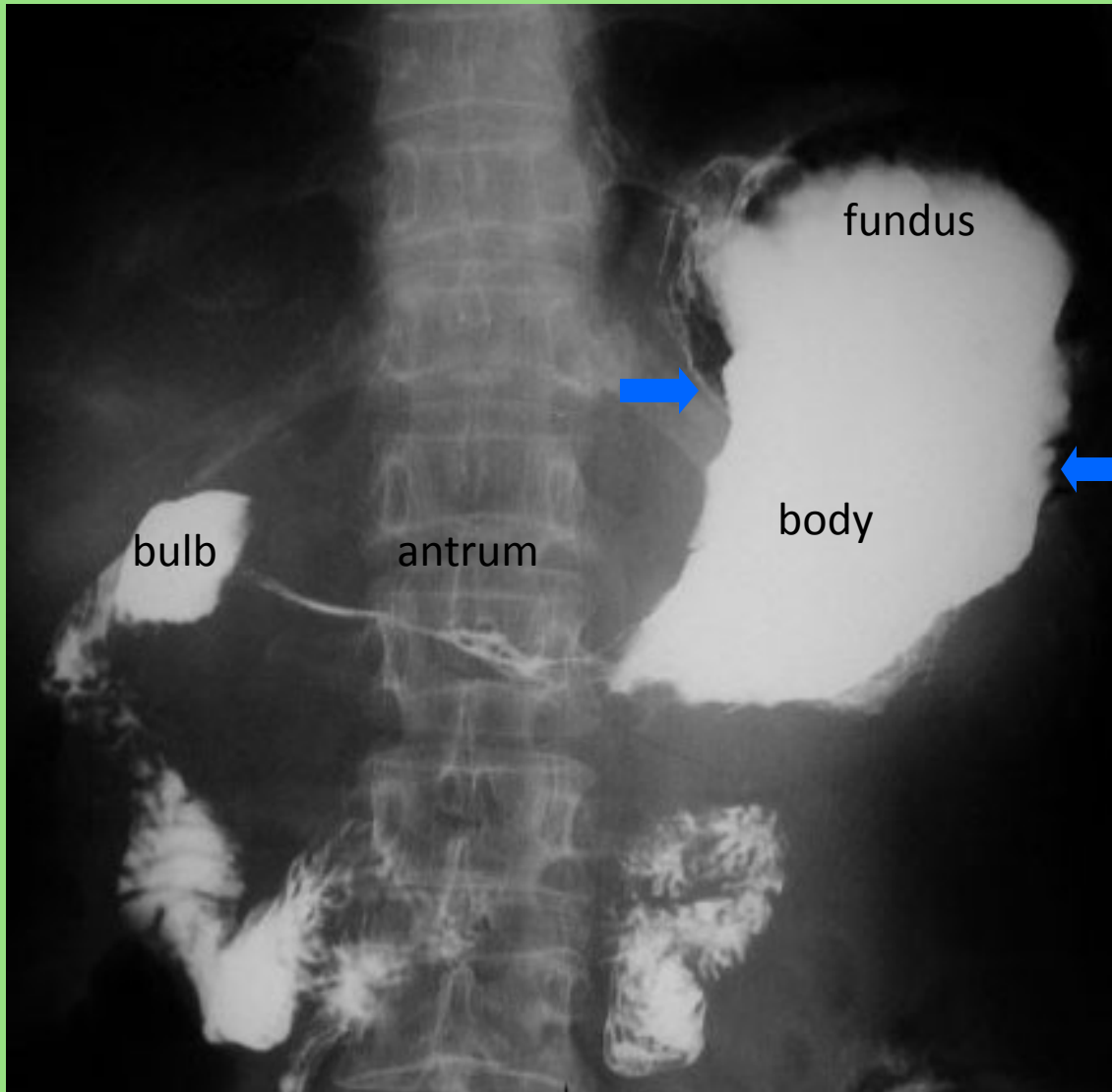
Cancer Esophagus



Rate tail appearance



Radiographic appearances : Gastric cancer

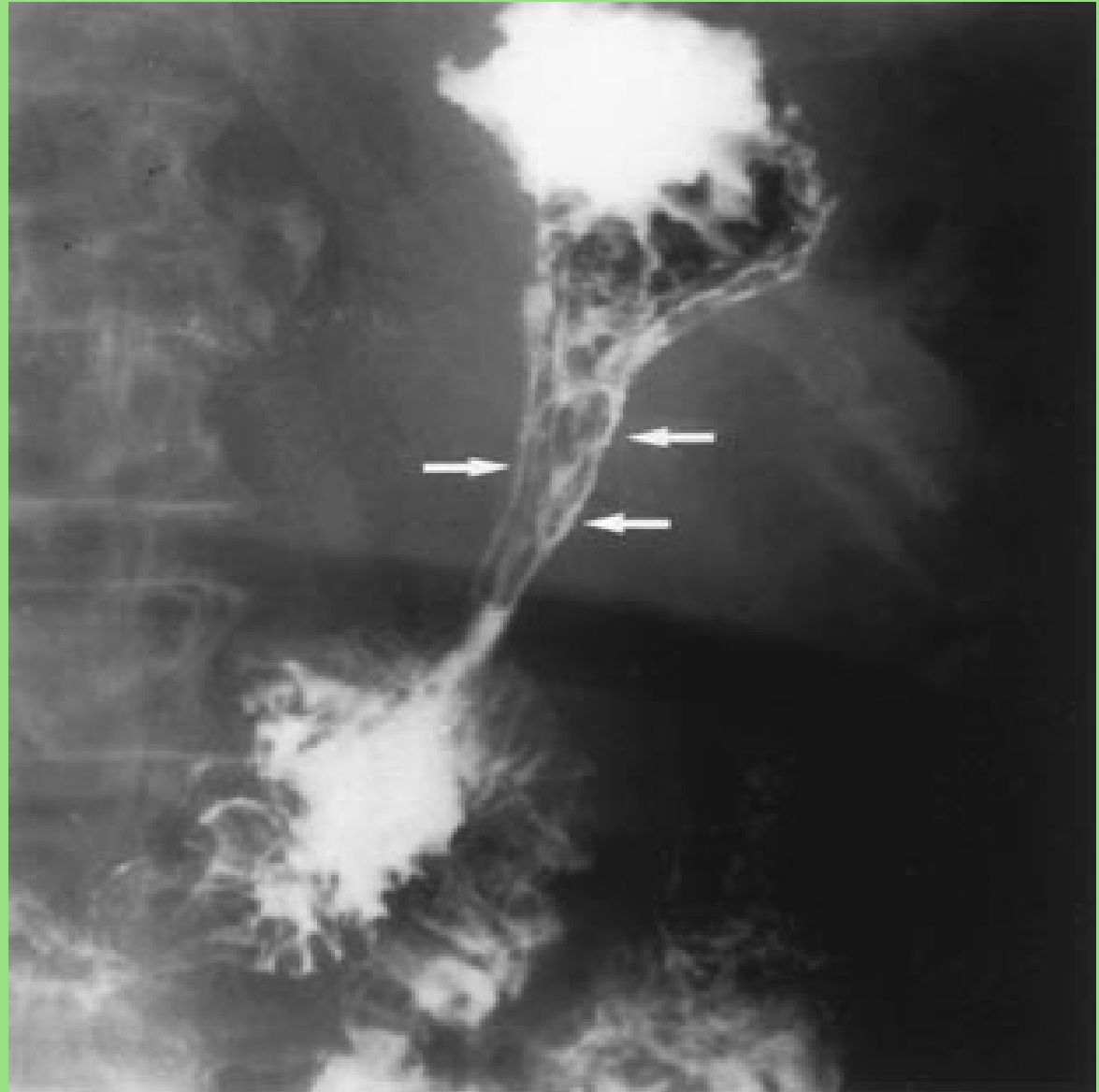


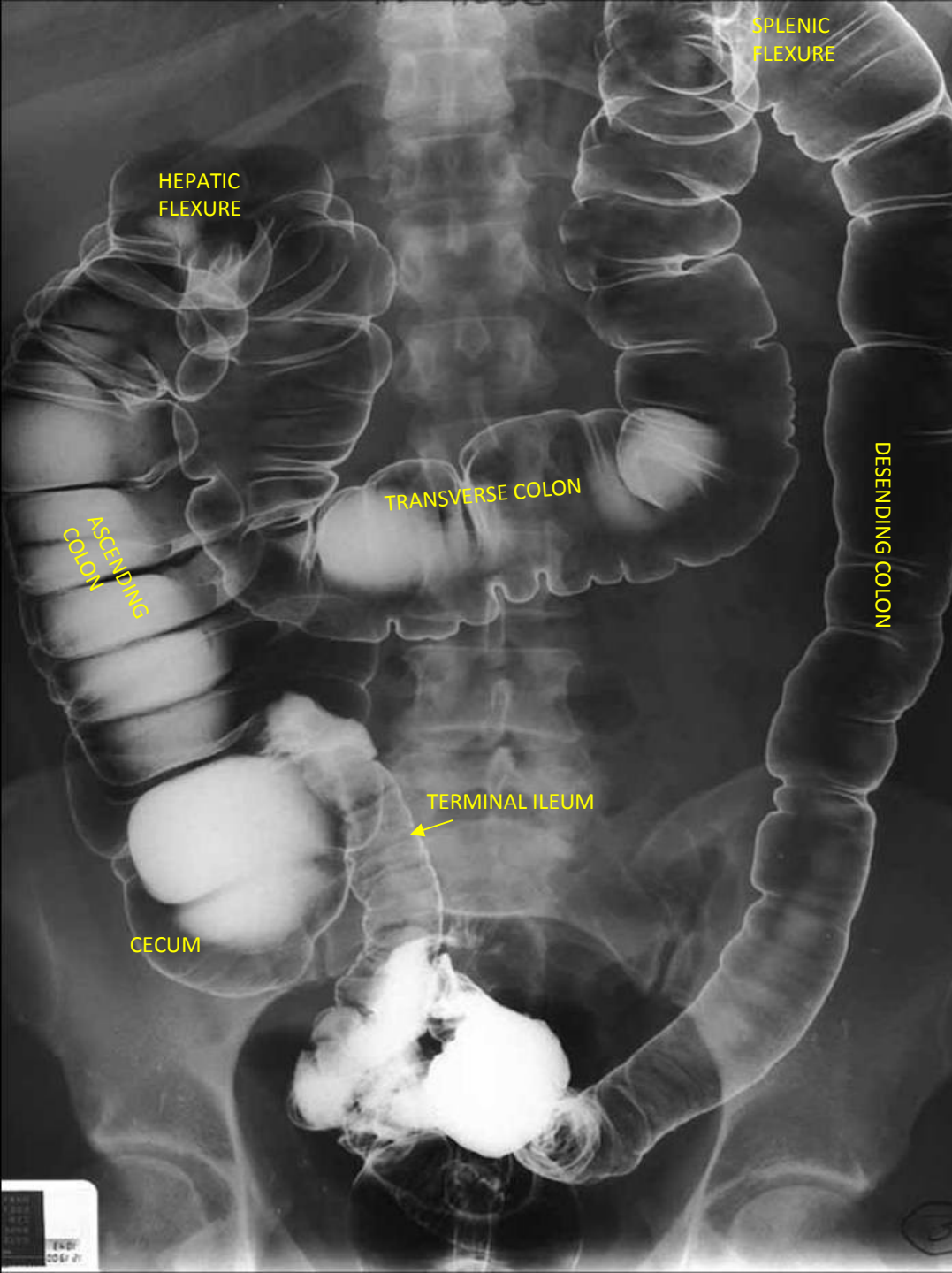
Focal constricting lesion

: localized infiltrating carcinoma or localized scirrhous carcinoma
- circumferential irregular narrowing of the lumen with rigidity (as figure; involved body and antrum)

Gastric cancer

- No ability to distinguish between malignant and benign ulcers.

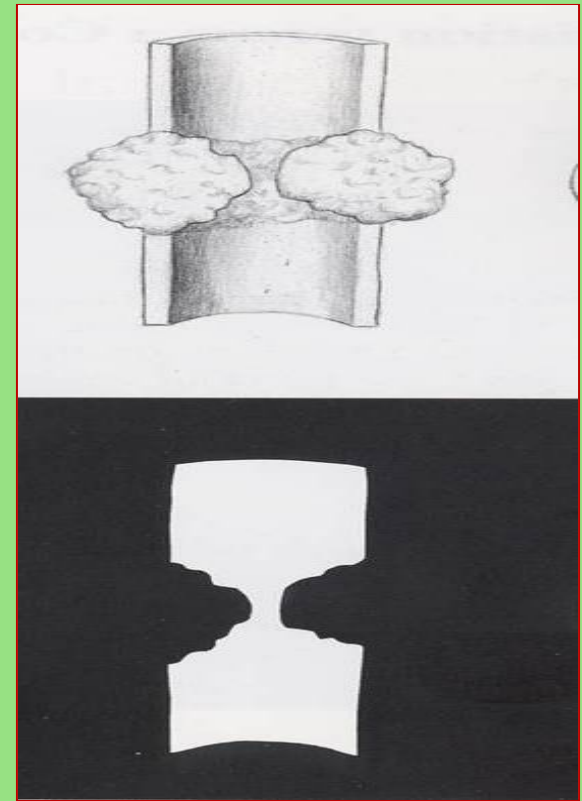
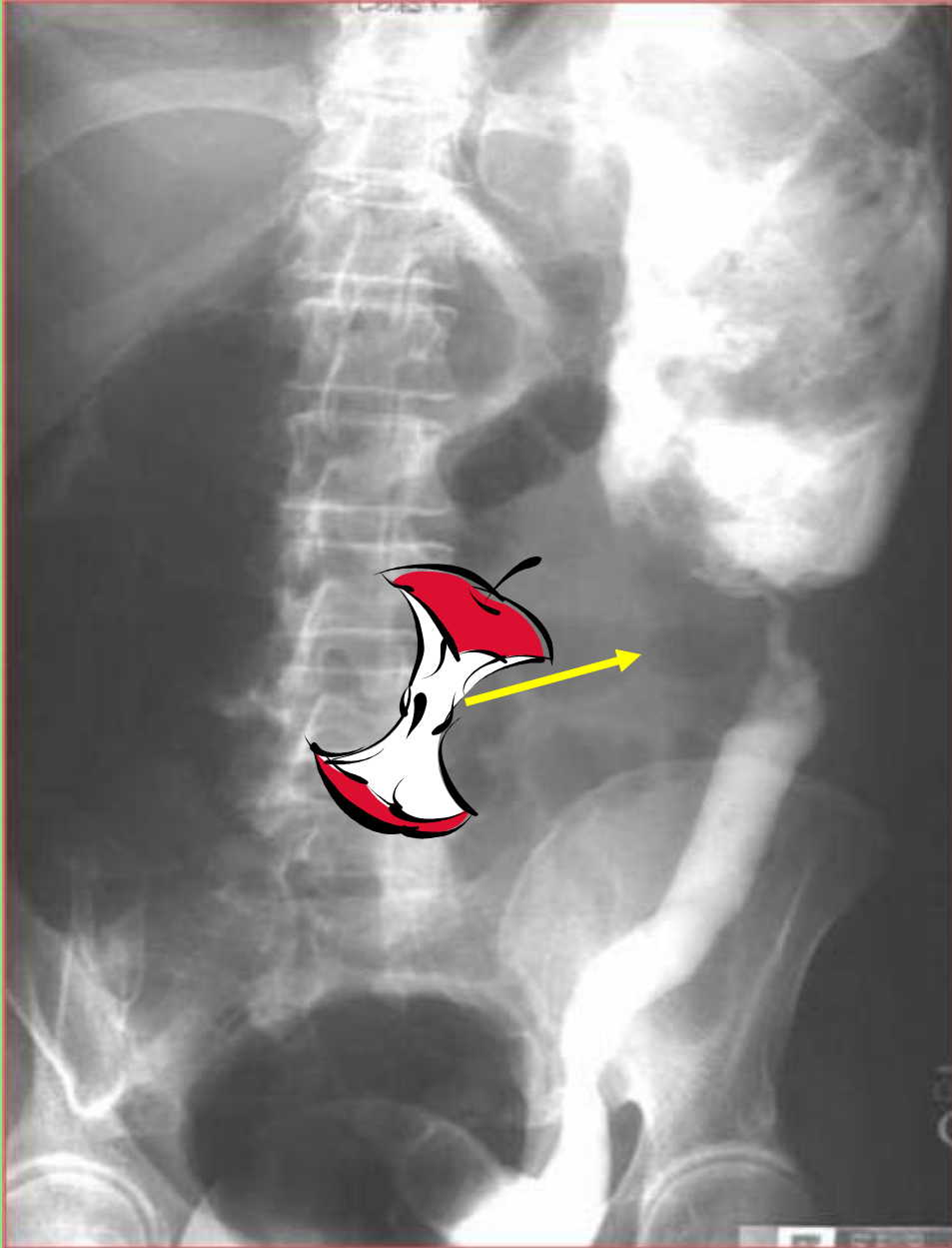




NORMAL COLON

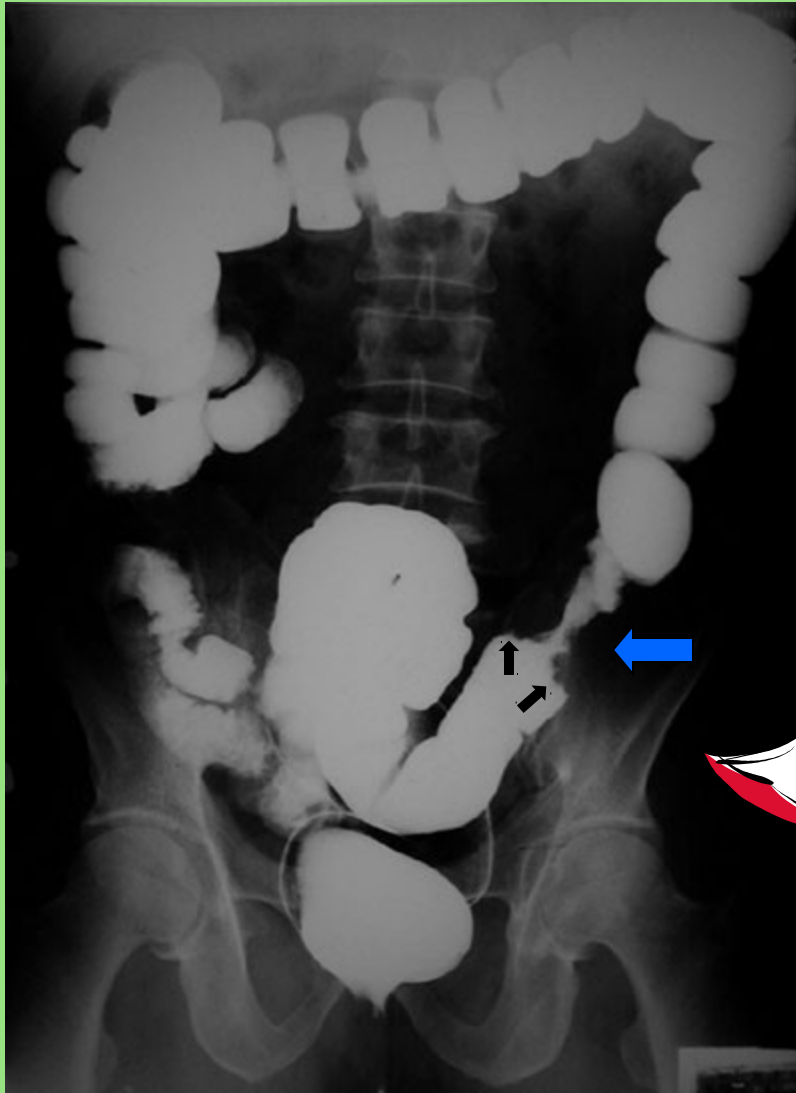
Normal air contrast barium enema shows filling of colon with air and barium retrograde to the cecum with reflux into the terminal ileum

COLON CANCER



Barium enema showing
apple-core type
constricting lesion with
proximal dilation of colon
—“APPLE -CORE”
constricting lesion

Colonic Carcinoma



(green arrow)

(black arrow)

(blue arrow)



Ulcerative colitis

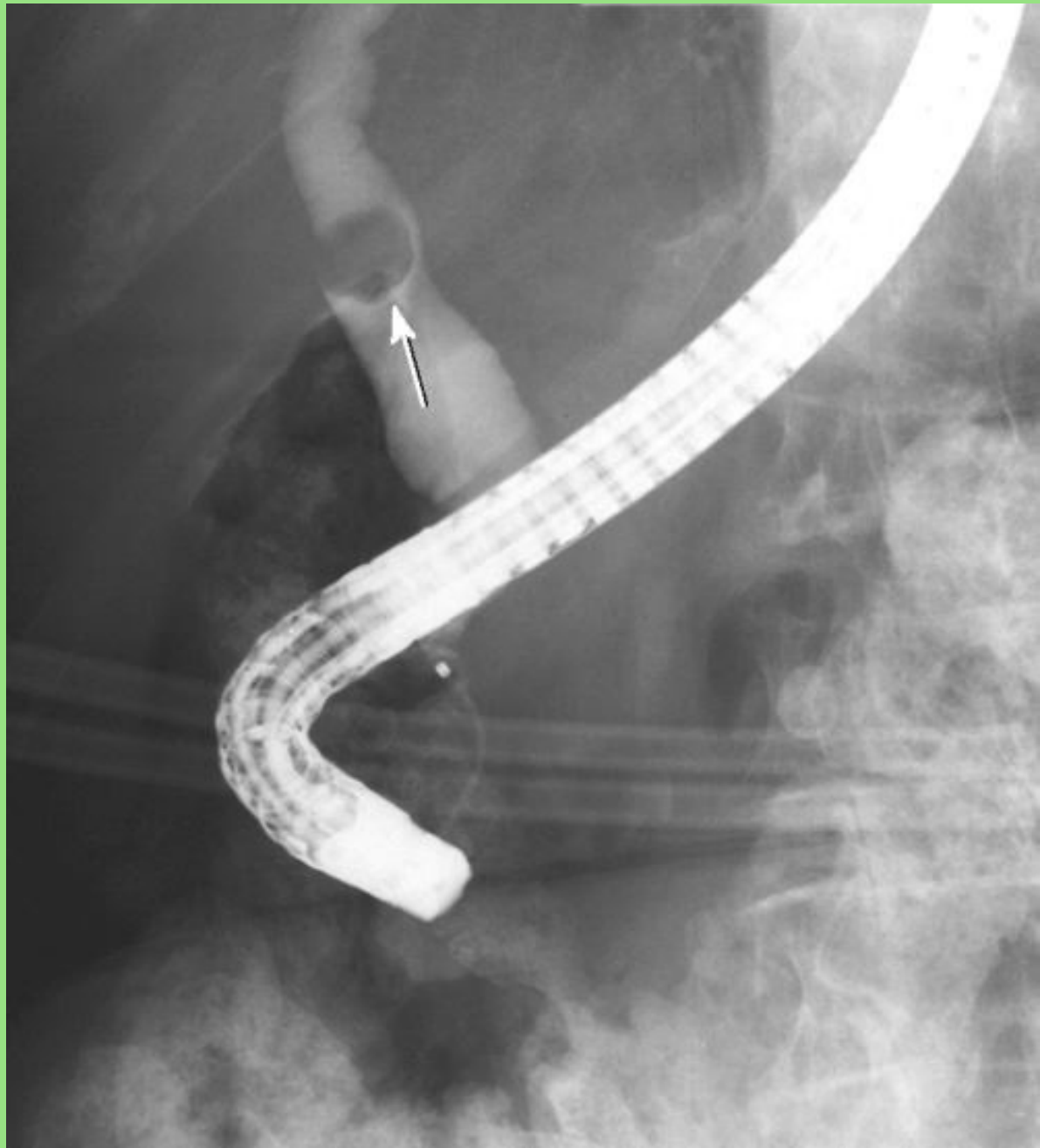


T-TUBE CHOLANGIOGRAPHY



T-TUBE Cholangiography : Stricture of common bile duct







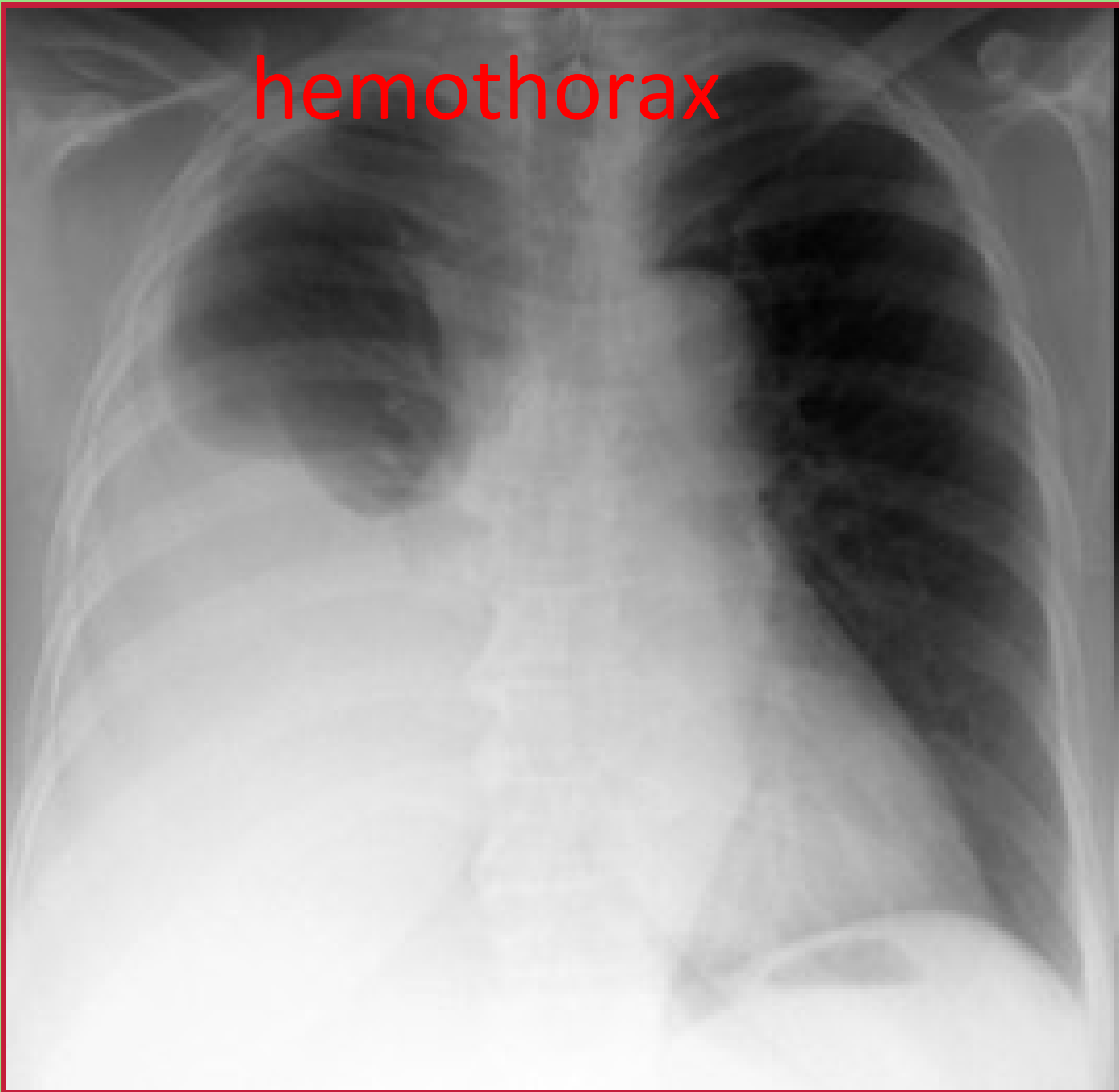
MRCP

CHEST X-RAYS



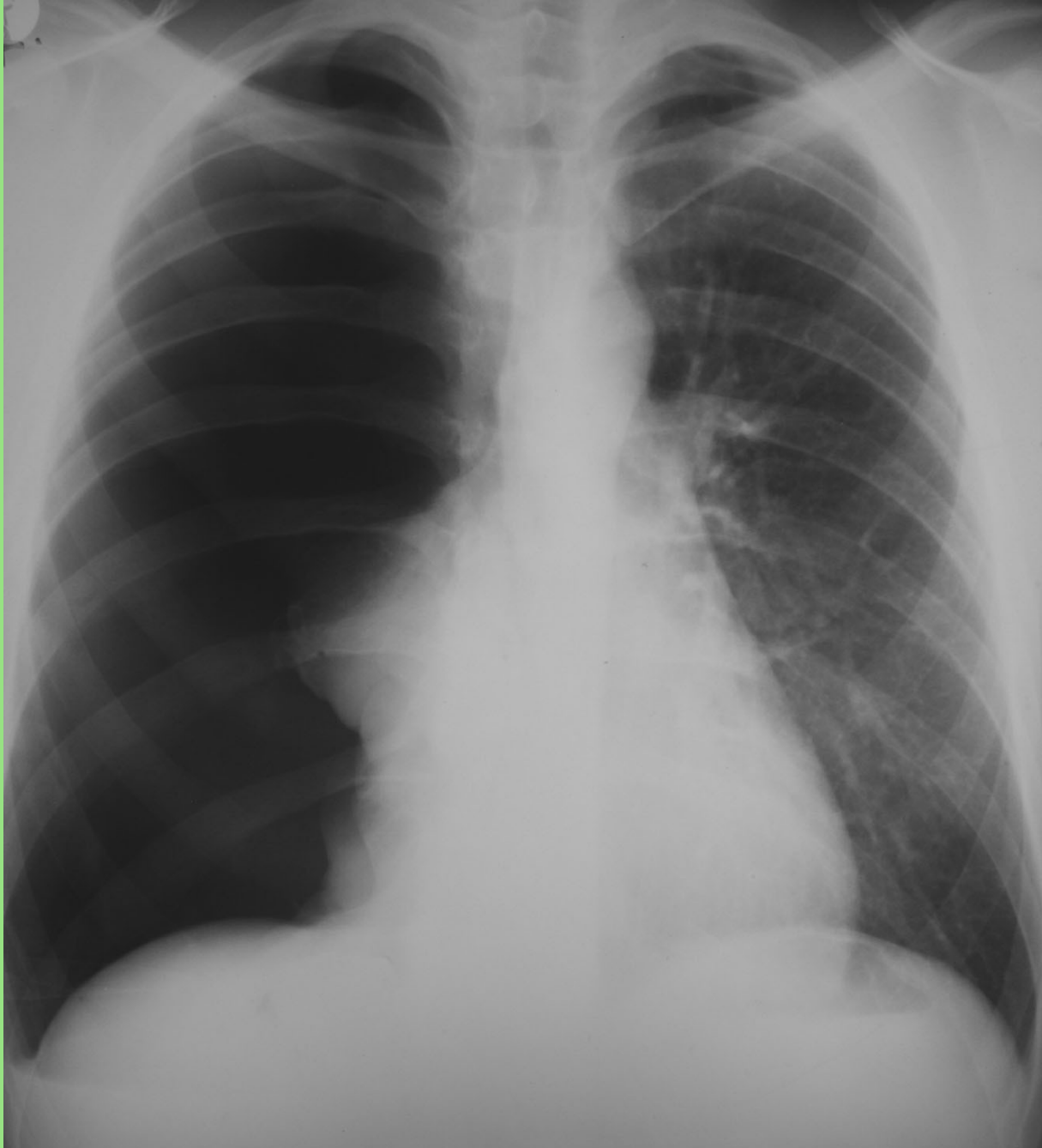
Pleural Effusion

hemothorax



Simple Pneumothorax





Pneumothorax

XRAY CHEST



STATION 2.25

Investigation

A 33-year-old woman was found to have human chorionic gonadotrophin (HCG) levels in excess of 100 000 IU/l in her urine following a miscarriage at 20 weeks.

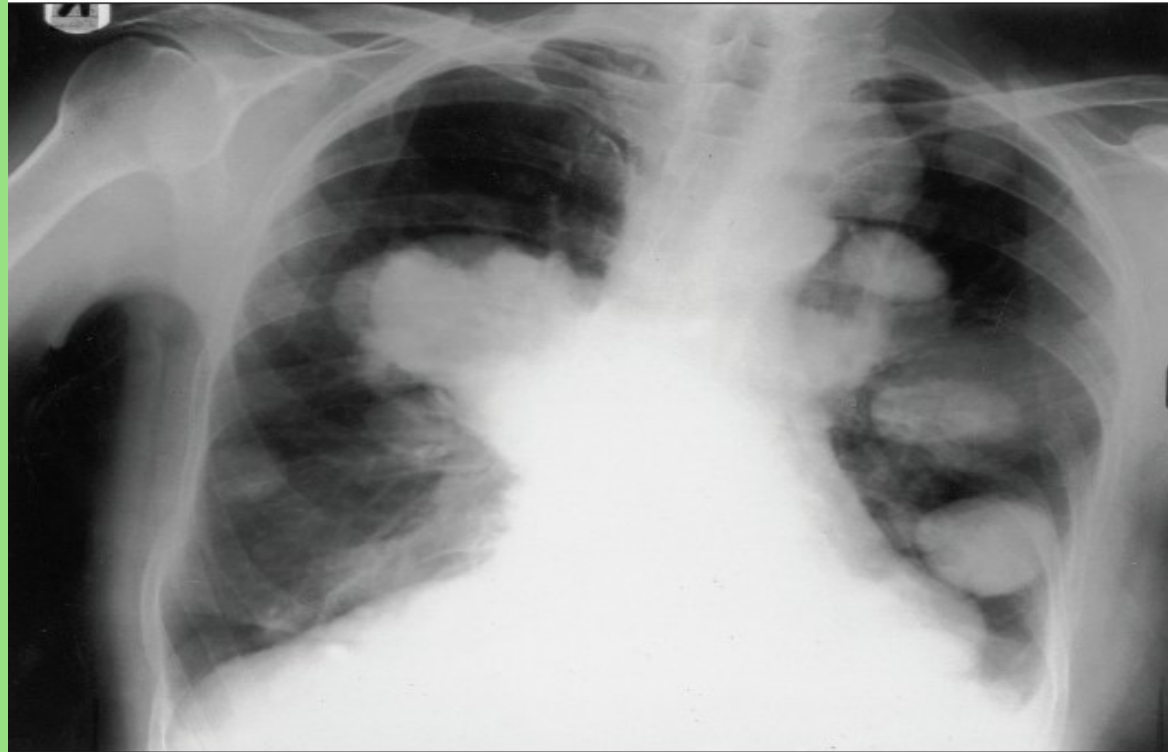


Fig 2.25 Patient's chest radiograph

- 1 State three causes of excessively elevated urinary HCG levels during or following pregnancy.
- 2 State the positive finding on the radiograph and your diagnosis.
- 3 How would you treat this patient?

(5 minute station)

IVUs

Right Kidney

Left Kidney

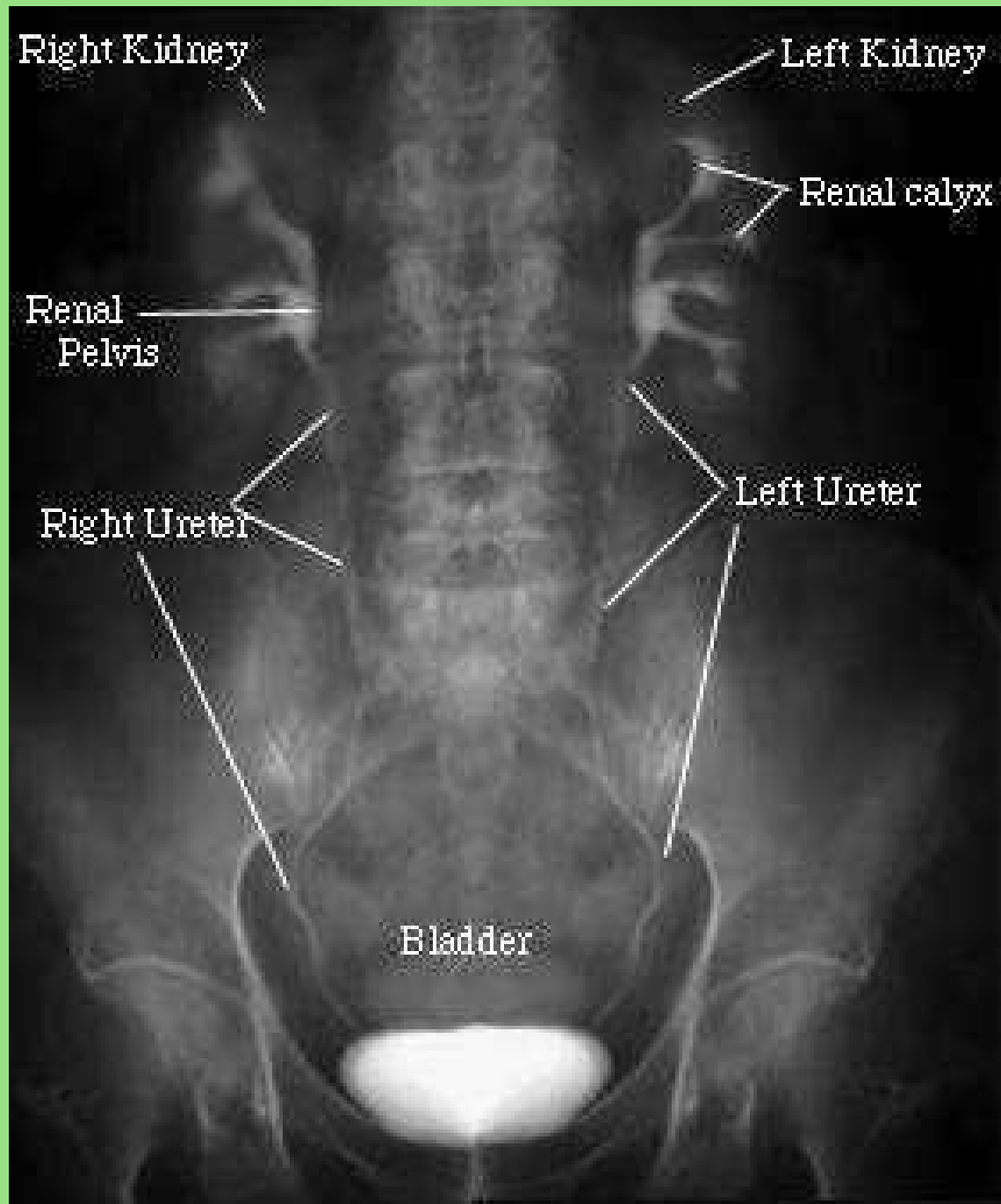
Renal calyx

Renal
Pelvis

Right Ureter

Left Ureter

Bladder







12

post micturition

IVP (URETERIC CALCULUS)

Ureteric stone
causing right
hydronephrosis.



OSCE-SURGICAL INSTRUMENTS

The standard questions to be asked:

- What is this instrument?
- Name the parts.
- What are its uses?
- What complications can arise

Ryle's tube:

- For gastric aspiration.

- After laparotomy

- Intestinal obstruction

- After anastomosis



Distal (inner) end



Proximal (outer) end

Catheter

1. What is the use of this?

- ☐ For nasogastric feeding.
- ☐ To aspiration gastric secretions or contents before emergency surgeries & in bowel obstruction.
- ☐ Gastric empty because emergency surgery(Road traffic accident

2. What are it`s different parts?

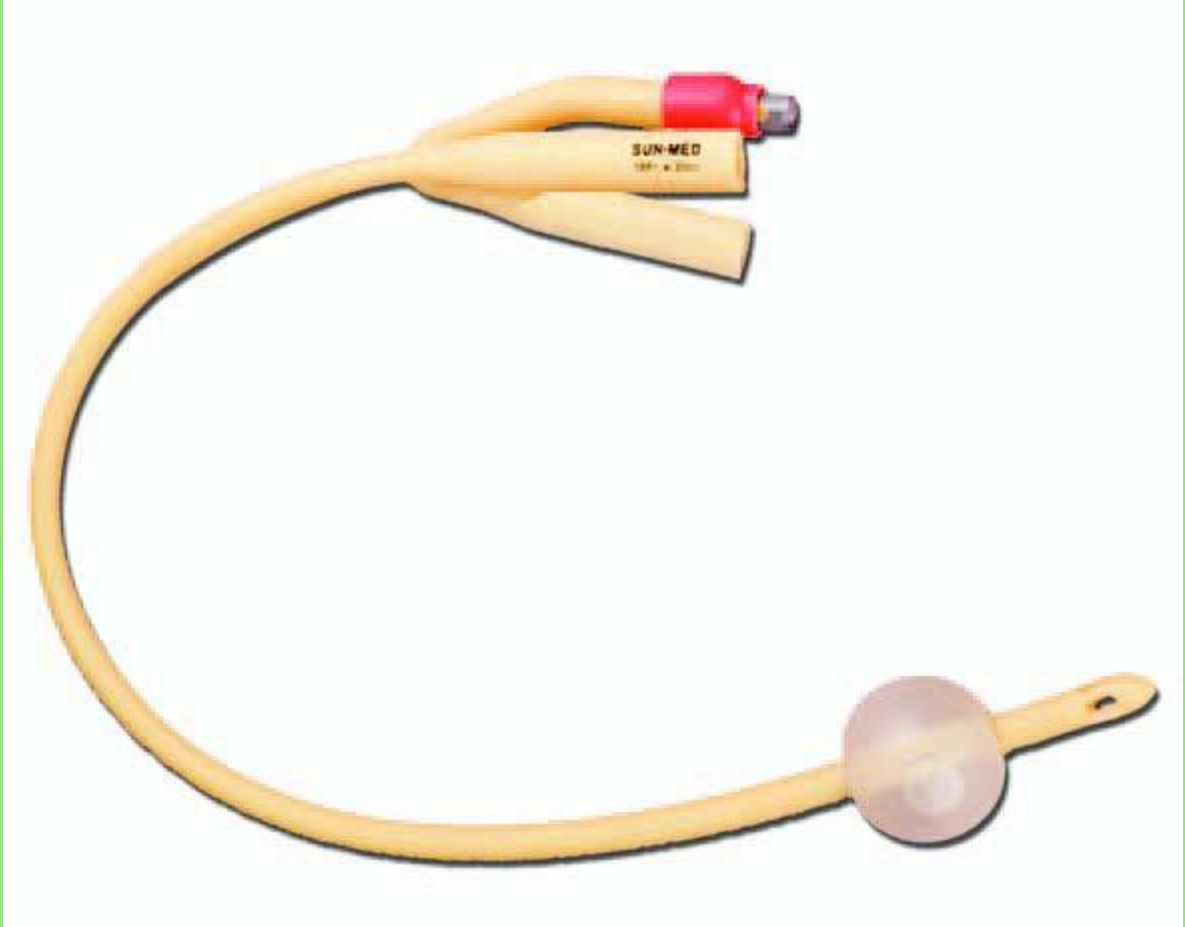


1. What is the use of this object?

- ☐ Drainage of urine from bladder.
- ☐ Fluid management of patient.
- ☐ Measure urine output.

2. What is the use of 2 channels?

- ☐ *1, Passage of distil water through x & inflate the balloon located at the end of the tube in order to keep the catheter inside the bladder. So we call it “self retaining catheter.”*
- 2. *For drainage of urine*



☐ Used for irrigation of the bladder by using normal saline after surgery

☐ Also used as gastrostomy tube

3. What are the indications?

☐ Gastrostomy Pt, loss of Autonomic NS functions, in cardiac failure.

4. Disadvantages: -

☐ Connect the external and internal environment.

Therefore infection can be spread to exterior to interior.



❑ ***What are the uses of this tube?***

❑ To maintain Pt. air way in injured or unconscious Pts.

❑ To ventilate unconscious Pts.

❑ To give anesthetic drugs.

e.g.: -halothane

❑ To ventilate pts. In intra oral surgeries.

❑ To prevention by use of cuff.

❑ ***What is the use of “a”?***

❑ Inflation of “a” with air helps to keep the tube in position & prevent aspiration.

❑ ***How does this tube an adult differ from that of a young child?***

❑ In children’s endotracheal tube is a 3.5 mm area which is radio opaque that help to detect the position of the tube in x-rays.



What are the uses of it?

- ☐ To depress the tongue preventing the tongue falls back
- ☐ To maintain a pts airway
- ☐ To keep air way pt until recovering from anesthesia



www.geraldtan.com

1. What are the indications?

☐ Acute airway obstruction.

e.g.: -forging body.

☐ To ventilate Pts following surgeries including oral cavity.

☐ To protect the lower airway

e.g.: -aspiration of saliva in unconscious Pts.

☐ For Pt requiring artificial respiration – respiratory insufficiency.

☐ Who has dead space depression

2. What are the advantages?

- ☐ Anatomical dead space is reduced.
 - ☐ Work of breathing is reduced.
 - ☐ Alveolar ventilation is increases.
 - ☐ Level of sedation needed for Pts comfort, is reduced.
-
- ☐ No damage to the vocal cords

3. What are the disadvantages?

- ❑ Loss of heat & moisture exchange performed in upper airway.
- ❑ Desiccation of tracheal epithelium.
- ❑ Loss of ciliated cells & metaplasia.
- ❑ Over production of mucous

4. How do you manage tracheostomy post operatively?

- ☐ Suction.
- ☐ Humidification.
- ☐ Change of the inner tube & remove mucous plugging.
- ☐ Physiotherapy.

T- tube

* **Indications.**

* **Time of removal.**

Therapeutic uses

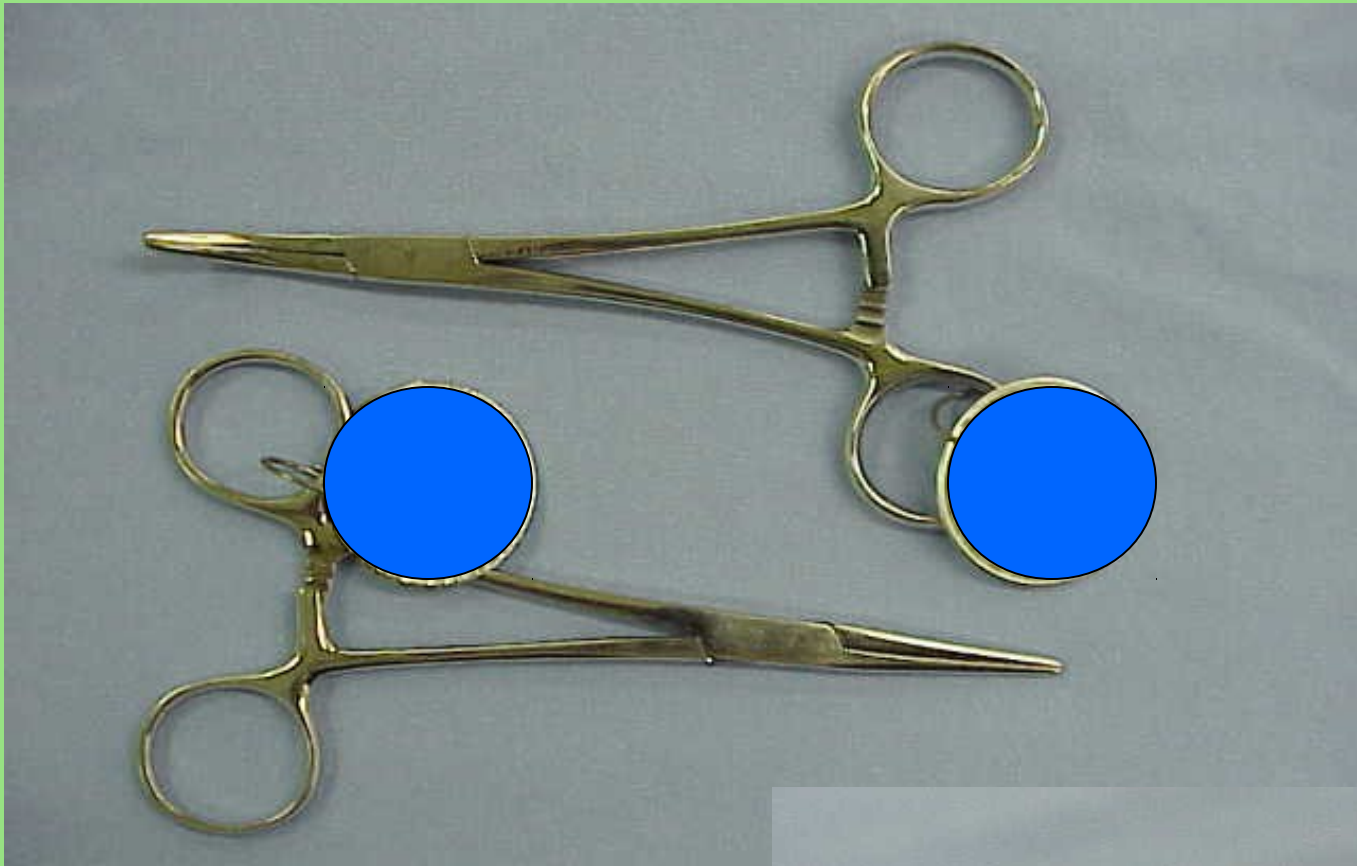
Inside
common
bile duct



Deaver Retractor

- Common *retractor* used in major abdominal procedures. Comes in several different widths. May also be used during vaginal procedures.



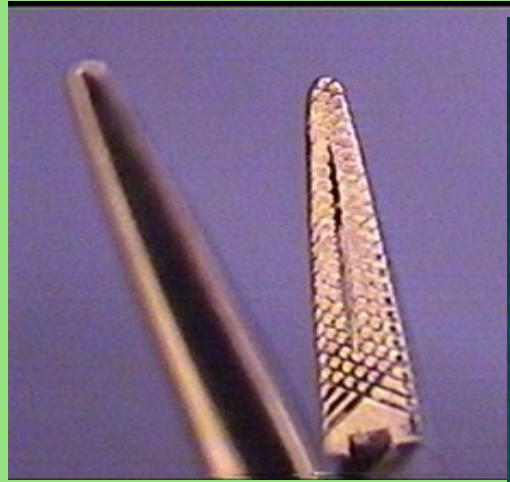


Crile hemostatic forceps (curved and straight)



Bard-Parker #3 scalpel handle





Needle holder:

* **Grasp** the needle
for stitching



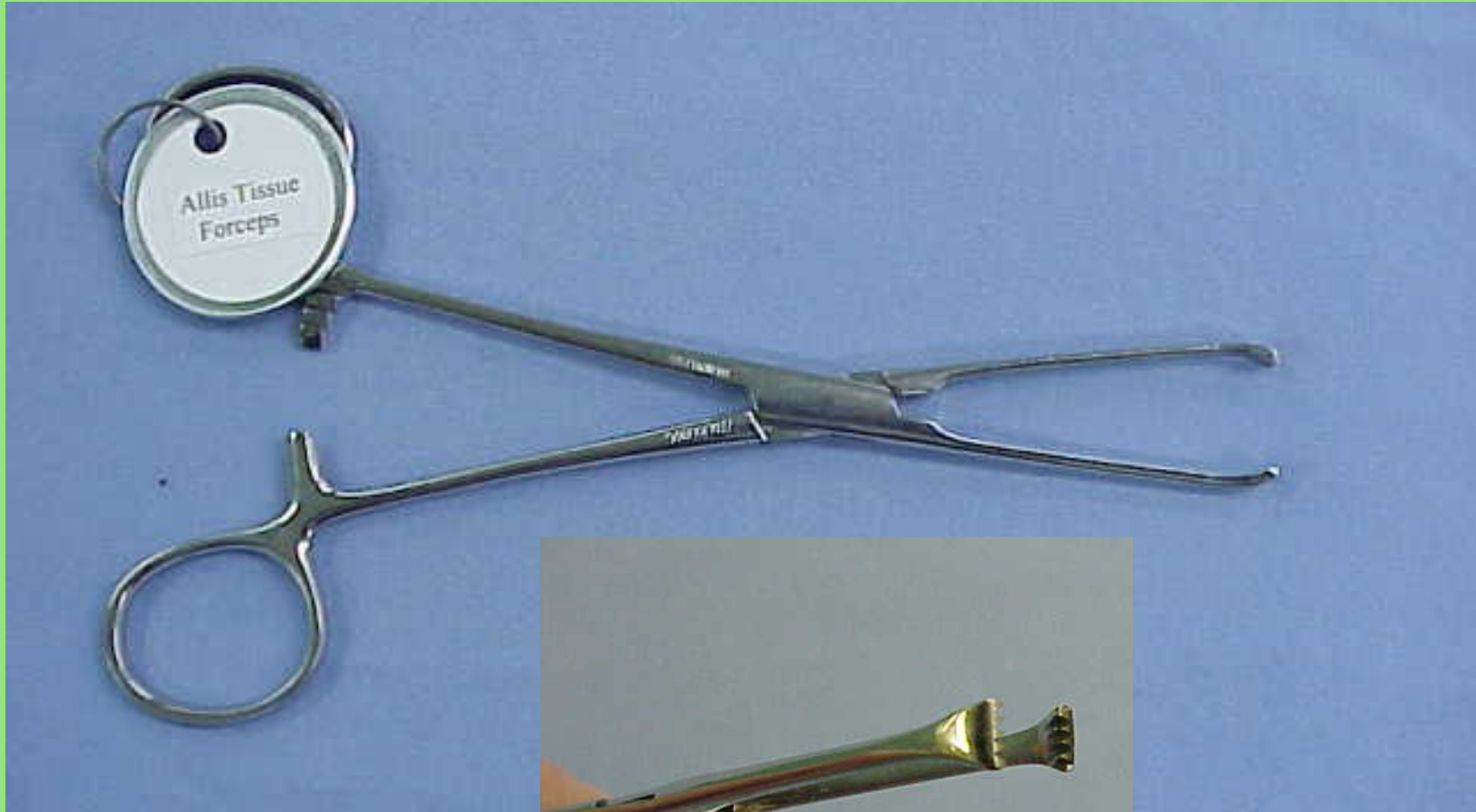
Kocher (Oschner) hemostatic forceps



Metzenbaum scissors



Allis tissue forceps



Babcock tissue (intestinal) holding forceps



Doyen Intestinal Forceps

Straight or curved



Stone forceps

(Ureteric, biliary and Bladder):

•Used for

Stone extraction from the ureter, common bile duct and urinary bladder.



Ureteric & Billiary



Bladder

Moynihan (Cholecystectomy forcep):

•Used in

**Grasping the cystic vessels &
cystic duct before their ligation
during cholecystectomy
operation.**



Above all



Any Questions ???





THANK YOU