



start from slide 64 then back  
to past papers

## VASCULAR



# • QUESTION

عقدية  
١٥

Wateen 2023

5 days after hip surgery patient complained of right leg pain ,with the picture attached.

- 1.What is the best imaging test to confirm your suspicion ?
- 2.What is your initial management ?
- 3.Mention 4 differentials?
- 4.What are the complications:



# • ANSWER

1. Venography - DOPPLER ULTRA sound

2. LMWH

3.

1) DVT 2) Cellulitis 3) Lymphadenopathy, lymphatic obstruction 4) Chronic Deep Vein Insufficiency 5) Rupture of baker's cyst

4.

1) Pulmonary embolism 2) Ulcers 3) Ischemia

Note diagnosis is DVT



# QUESTION

Wateen 2023

RF For DVT

70 year old male with atrial fibrillation presented with acute right leg pain and numbness.

1. What's your diagnosis?



لو كان الة فتة مفيد  
Chronic deep vein insufficiency  
يمكن ان تكون



# • ANSWER

DVT (~~not sure~~)

*mostly* *yes*



# • QUESTION

Wateen 2023

مكرر عن علقو skin

Patient with history of fever and pain;

A- What is the diagnosis?

B- What are the most likely organisms to cause that?



# • ANSWER

A. Cellulitis

B. <sup>1st</sup>Staphylococcus and <sup>2nd</sup>streptococcus bacteria



# • QUESTION

عکرد یزن ۲۰۲۳

Wateen 2023

Patient had surgery 5 days ago and came with leg pain

a) The diagnosis:

b) Treatment



# • ANSWER

a) DVT

b) LMWH /warfarin



# • QUESTION

Wateen 2023

حکومت یمن ۲۰۲۳

case for patient who had fever;

a) Diagnosis

b) Most common causative organism



# • ANSWER

A) Cellulitis

B) Staphylococcus and streptococcus bacteria



• QUESTION

صندوق الـ Hx مريض نلاقى انه على dialysis

Name the syndrome



# • ANSWER

Steal syndrome



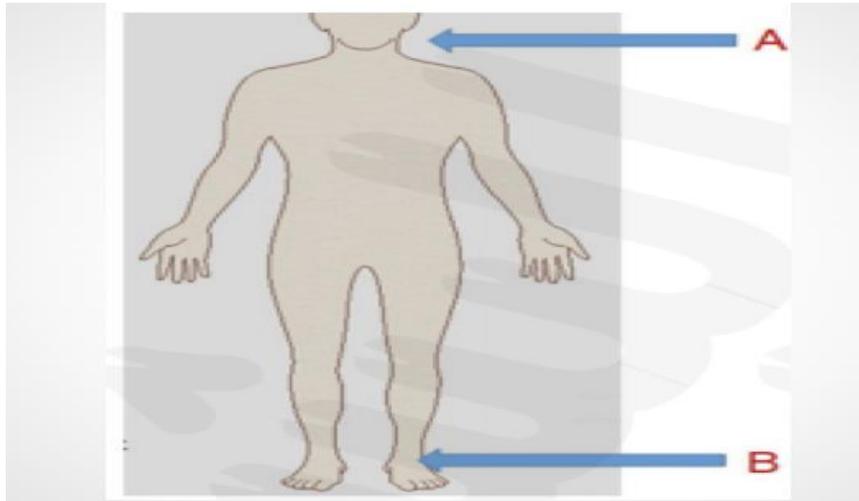
# • QUESTION

Wateen 2023

How to quickly estimate blood pressure by pulse:

A) If you palpate a pulse at 'A', the number above which the systolic blood pressure will be is?

B) If you palpate a pulse at 'B', the number above which the systolic blood pressure will be is?



# • ANSWER

A. 60 MMHG

B. 90 MMHG



# • QUESTION

مقرر رپوزن ۶

Wateen 2023

- a) Name the diagnosis
- b) What is the cause



# • ANSWER

a) Venous ulcer

b) Venous valve insufficiency



# • QUESTION

Harmony 2022

✓ 24. 50 year old lady, presented to clinic with generalized leg swelling that start from foot up to thigh level, what is your provisional diagnosis

- a. Femoral vein DVT
- b. Lymphedema
- c. Swelling is due to systemic disease
- d. Maldistribution of fat ( Lipedema )
- e. Necrotizing fasciitis

Answer: B



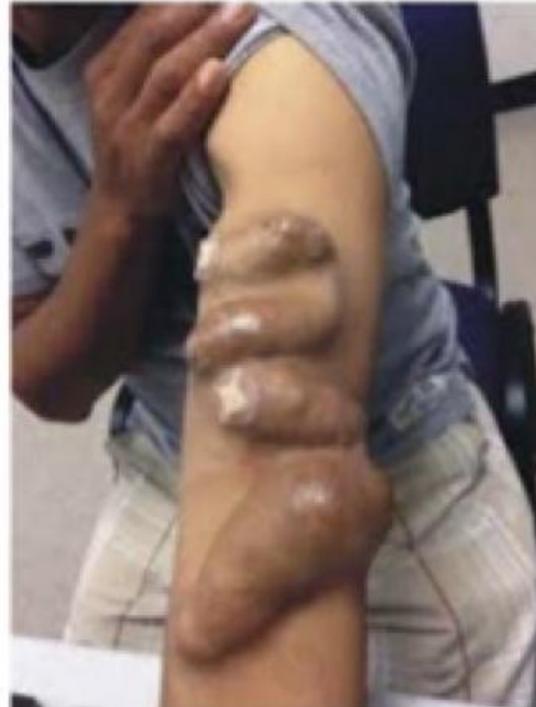
# • QUESTION

Harmony 2022

35. What is your spot diagnosis?

- a. Vessel arteritis
- b. Ectatic Vessel
- c. Mycotic Aneurysms
- d. Pseudoaneurysm
- e. True Aneurysm

Answer: D



# • QUESTION

Harmony 2022

فكر بيزن  
حلف  
السلام

A. What is the diagnosis?

B. what is the cause?



# • ANSWER

A. Pressure ulcer

B. Uncontrolled DM and pressure



# • QUESTION

Harmony 2022

- A. How do you determine the level of defect in varicose veins?
- B. give 2 surgical procedure to treat varicose veins?



# • ANSWER

A. ~~Truncate~~ test

*Brendelenberg (Tourniquet)*

*✓* B. sclerotherapy + laser ablation



# • QUESTION

عسر  
يرون

Harmony 2022

A. What is the following complication ,mention others?



# • ANSWER

pseudoaneurysm

Other complication : thrombosis + steal syndrome + CHF



# • QUESTION

SOUL 2021

55year old male, smoker, with hx of lower limb ischemia, complains of right lower limb rest pain and numbness :

1.Mention 5 signs present or absent to be looked at during inspection of lower limb for diagnosis:

(No picture)



# \* ANSWER:

1. Discoloration → black (dead tissue)
2. pallor
3. muscle wasting
4. ulcer → arterial ischemic ulcer
5. Abnormal hair distribution → minimal or no
6. nail brittle
7. amputation

} mostly the pt  
has those

in palpation, look for:

- ① Temp → cold in this pt
- ② pulse → pulslessness
- ③ tenderness → painful so much



# • QUESTION

SOUL 2021

A case of a 10 years old girl with unilateral swelling give the Dx: ✓



# ANSWER

Lymphedema



# • QUESTION

SOUL 2021

1. What is the Diagnosis?
2. What's the cause of this?



# ANSWER

1. Pseudoaneurysm
2. complication of AV shunt



✦ . QUESTION ✓

A) Name the condition:

B) What is the diagnostic method



# • ANSWER

A. Varicose veins

B. Venous duplex ultrasound

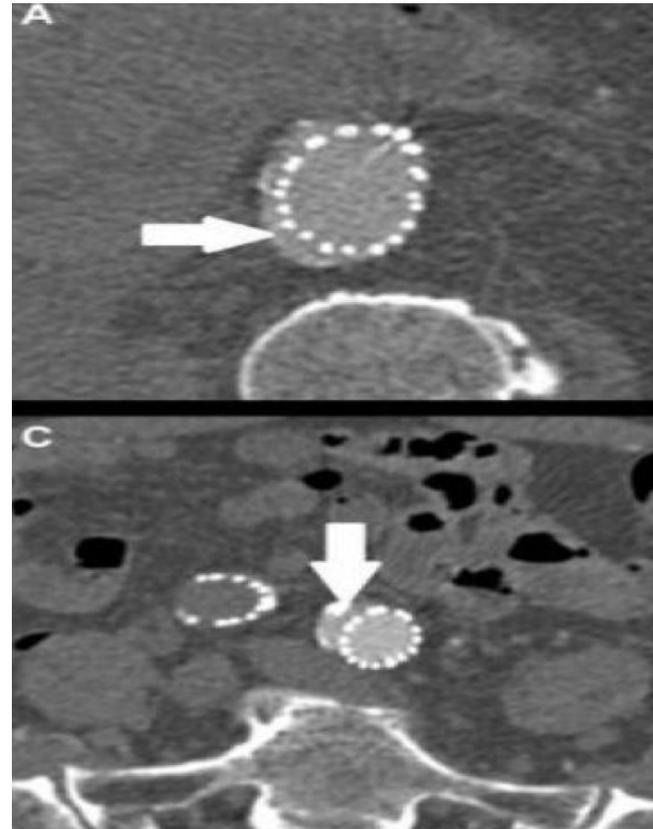


# • QUESTION

SOUL 2021

A) What is the structure:

B) Name the procedure this patient had in the past in the past



# • ANSWER

A. Abdominal aorta

B. Endovascular repair/stent



# • QUESTION

SOUL 2021

سؤال

Venous ulcer developed after 5 days of Surgery:

1. Diagnosis?
2. Can Transform to ?
3. What is the pathophysiology?
4. if this happened after 5 days of surgery what is the main cause you may think of?
5. Name 2 causes?
6. What is the sign?



# • ANSWER

1. Venous Ulcer
2. SCC
3. Blood stasis and increased Pressure inside the veins due to venous valves insufficiency
4. DVT
5. venous insufficiency and stasis (as DVT, varicose veins)
6. Lipodermatoseclerosis



# • QUESTION

عسر، زبون

IHSAN 2020

I. What is your spot diagnosis?

II. What is your management?

(CT Angiogram Of Renal Artery Stenosis )



# • ANSWER

.1. Renal artery stenosis

II. Renal angioplasty & stenting



# • QUESTION

صبر راجح

IHSAN 2020

1. Name the condition that this patient has :

2. What is the best imaging test for this patient ?



# • ANSWER

1. Varicose Veins

2. Doppler Ultrasound or Venogram



# • QUESTION

صحة  
اليرقان

IHSAN 2020

1. What is the most probable cause for this patient's condition?
2. What is the best imaging test to put a treatment plan?



# • ANSWER

1. Lower Limb Ischemia

2. CT Angio, Angiogram, Doppler US...etc were all accepted by the Dr



# • QUESTION

2019 – Before

عسر البول

1. What is the system involved in this system (name of the vessel)?
2. Name modalities of treatment?
3. What is the diagnosis?
4. Mention 2 complications?



# • ANSWER

1. Long Saphenous vein

2.a) high ligation and vein stripping

b) sclerotherapy

3. Varicose veins

4.

1) Bleeding 2) ulcer 3) Thrombophlebitis 4) discomfort and pain



# • QUESTION

حصر در این

2019 – Before

what minimal invasive vein procedure produced this result? Name two modalities

کف دست



# • ANSWER.

- 1) Sclerotherapy
- 2) Radiofrequency Ablation
- 3) Endovascular Laser Ablation



# • QUESTION

عسر  
يأس

2019 – Before

1. What would you call this ulcer?
2. Looking at the leg, What is the underlying disease?
3. What type of skin malignancy would this ulcer change to?



# • ANSWER

1. Venous Ulcer .

2. Chronic Venous Insufficiency

3. Squamous Cell Carcinoma (SCC)



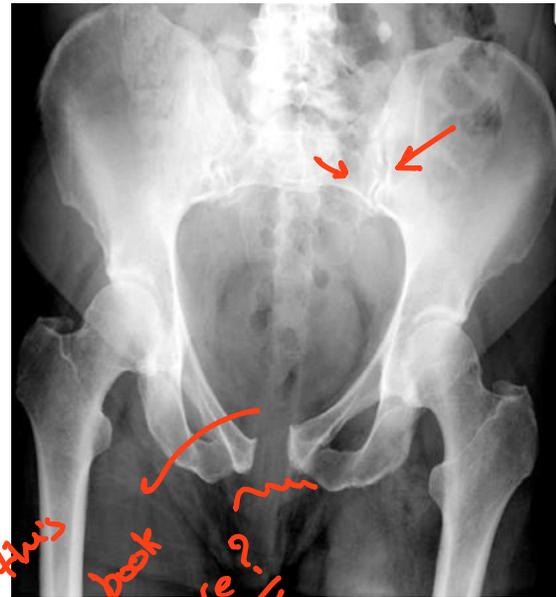
# • QUESTION

2019 – Before

This is pelvic x-ray of a patient post RTA:

Q1: What is the pathology?

Q2: What is the most serious complication? -



# • ANSWER

✓ 1. Pelvic fracture

✓ 2. Bleeding (Femoral artery)



# • QUESTION

عسر السعال

2019 – Before

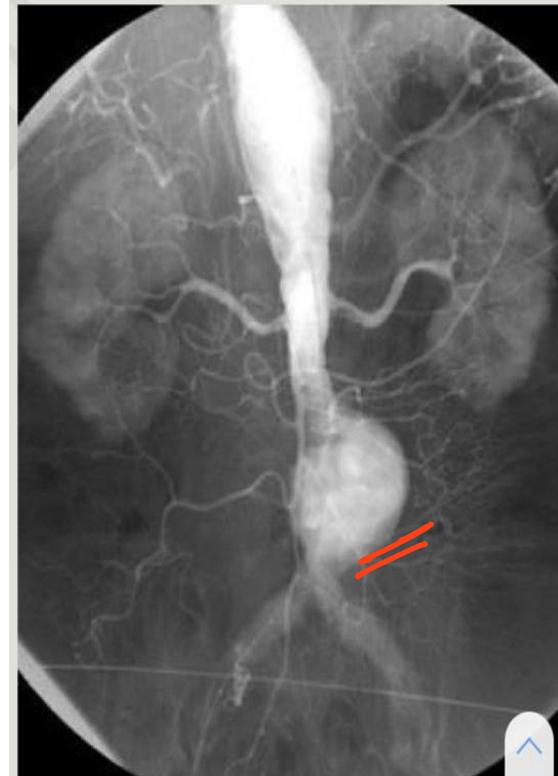
Patter Complained of abdominal pain and a pulsatile mass:

Q1: Name of this study?

Q2: What is this pathology and where is its location?

-

Q3: Mention 2 lines of management?



# • ANSWER

1. Angiogram

2. Abdominal aortic aneurysm) near the bifurcation

3. open surgical repair , Endovascular surgery



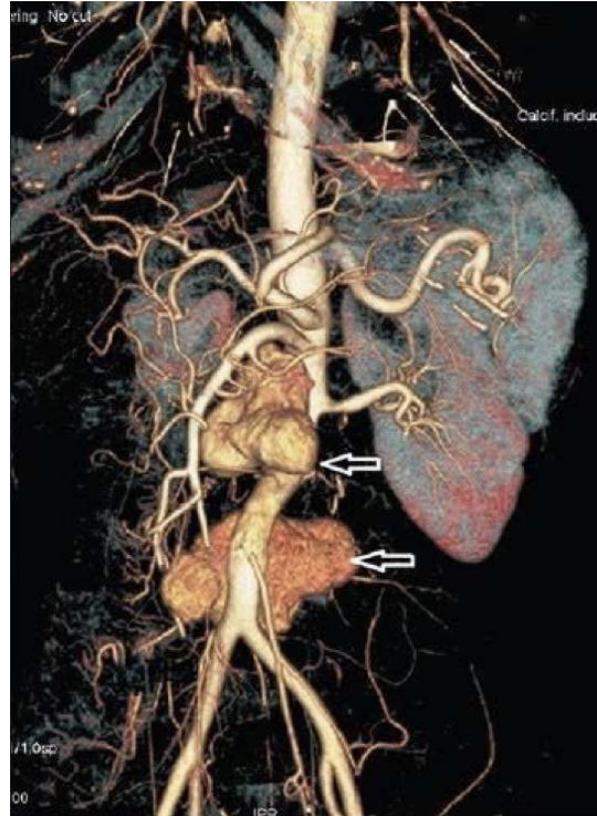
# • QUESTION

عسر الرئة

2019 – Before

1. Name of this study?

What is your diagnosis?



# • ANSWER

1.3D angiography

2.AAA



# • QUESTION

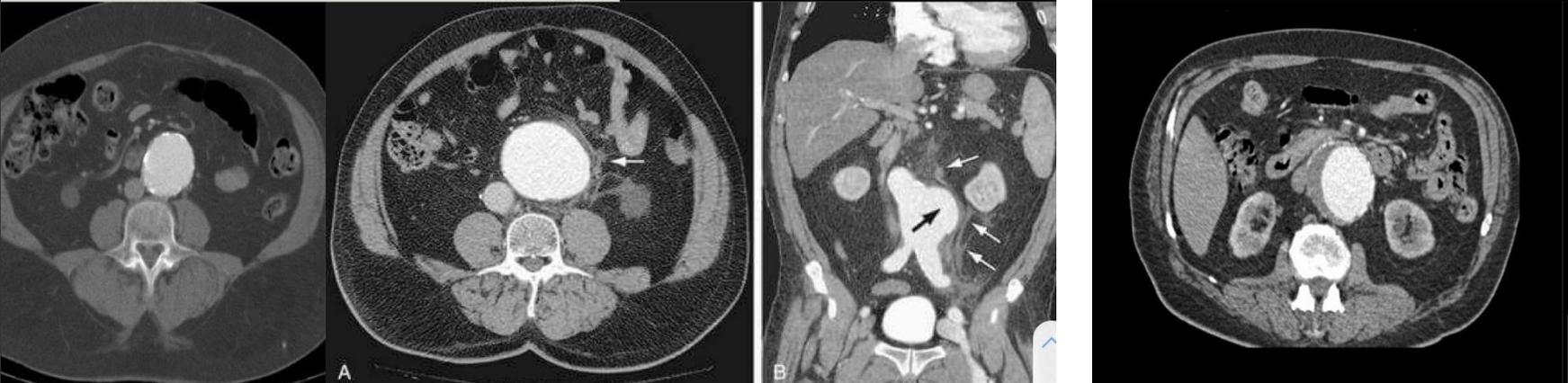
حصر الزمان

2019 – Before

A patient with a history of atrial fibrillation presented with a sudden severe abdominal pain:

Q1: Name of this study?

Q2: Dx? -



# • ANSWER

1. Abdominal CT with IV contrast *mostly ct angio*

2. AAA (Abdominal aortic aneurysm)

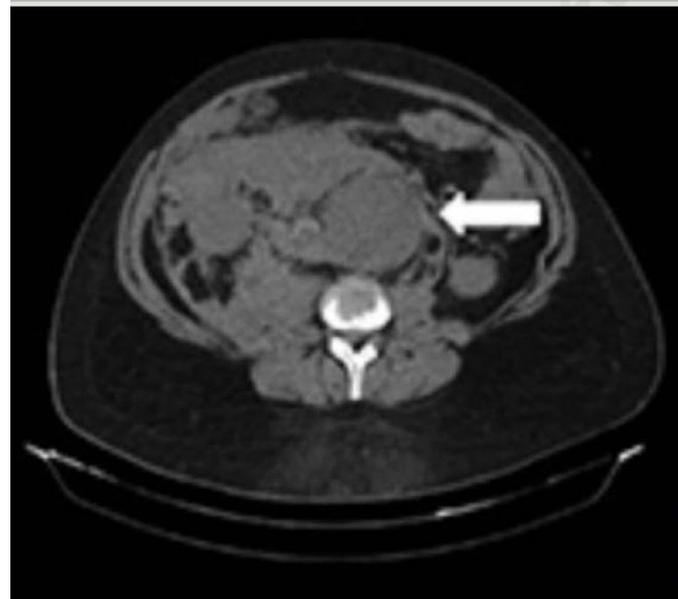


# • QUESTION

حقوق پزشکی

2019 – Before

1. What is the structure?
1. What's the past repair of this?



# • ANSWER

1. Abdominal Aorta

2. Stent



# • QUESTION

عسرر  
لوان

2019 – Before

Mention 2 modalities for management:

AAA



# • ANSWER

Medical or Surgical according to the size

1) Endovascular repair 2) Open repair

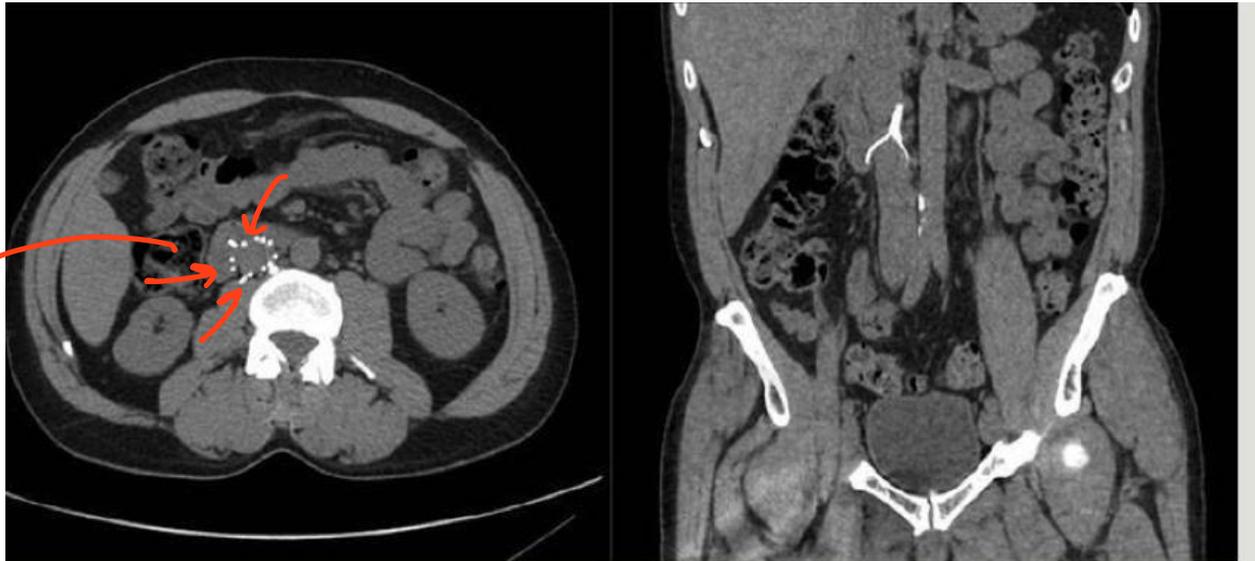


# QUESTION

2019 – Before

1.name of device seen in the CT

2.give 1 indication for it?

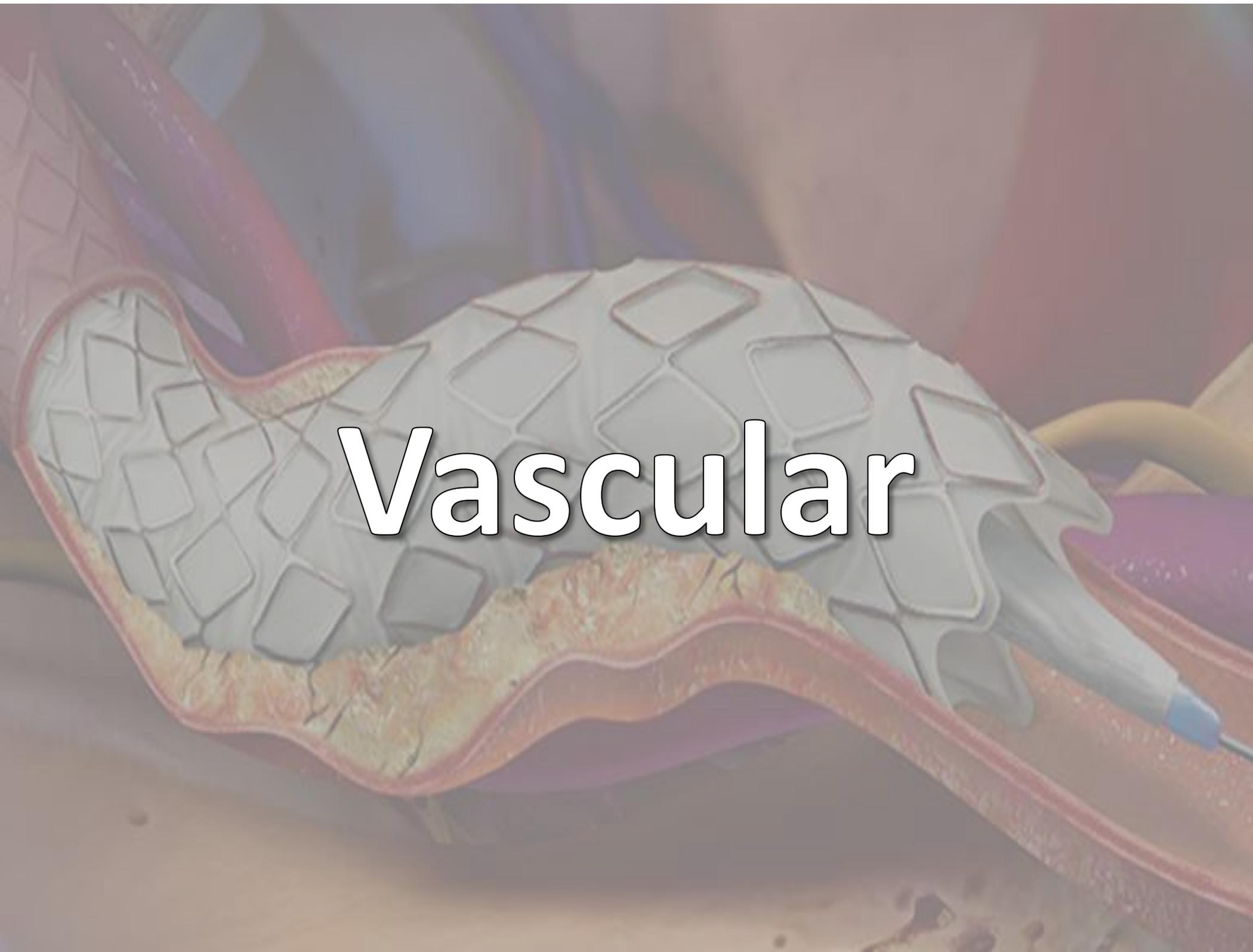


# • ANSWER

1. Inferior vena cava filter

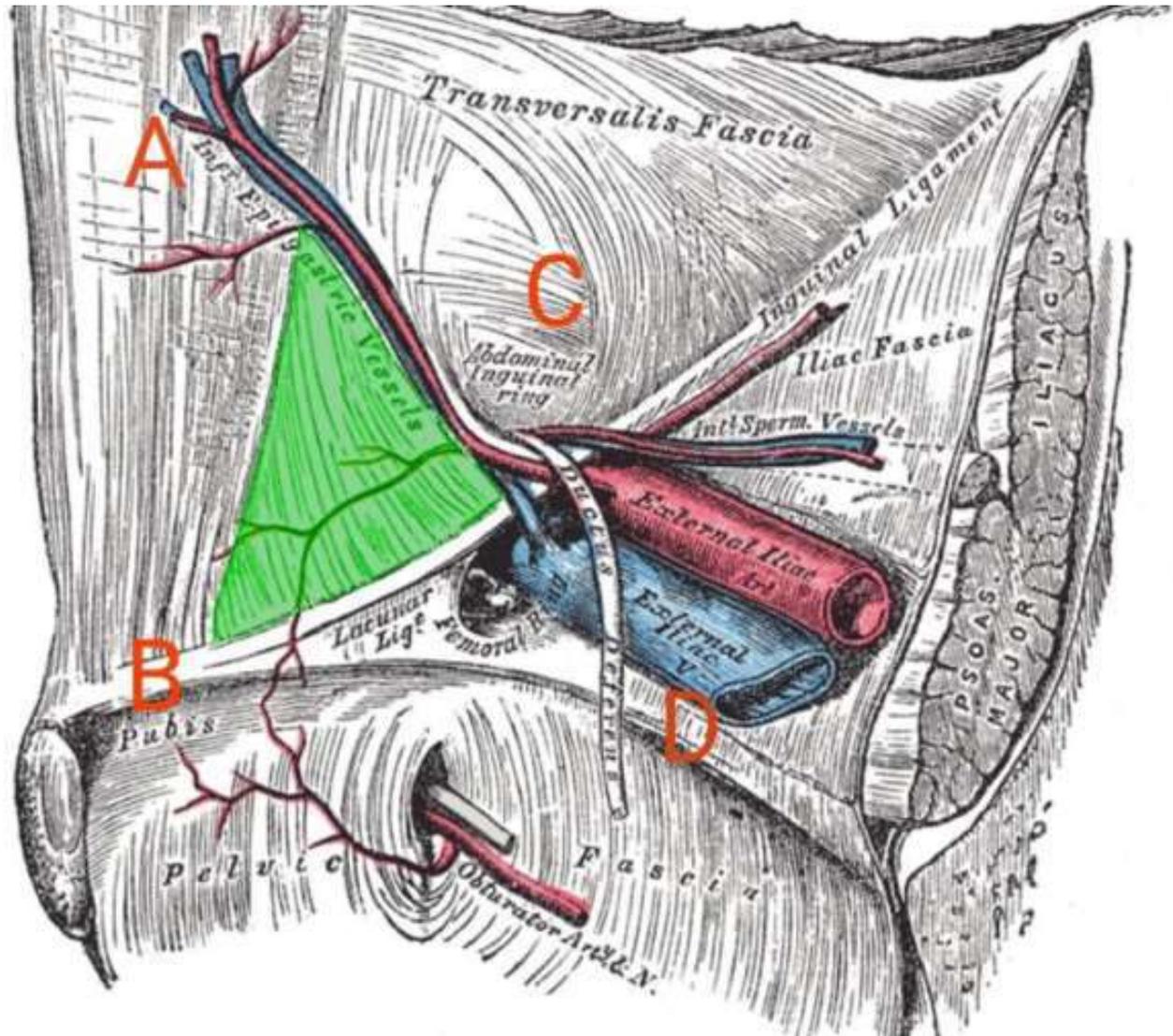
2. When anticoagulant therapy is contraindicated, ineffective or unsafe - Recurrent PE despite proper anticoagulation



An anatomical illustration showing a cross-section of a blood vessel wall. The vessel lumen is on the left, containing a red vessel. The vessel wall is shown in a cross-section with various layers. A grey, multi-lobed catheter is inserted into the vessel wall from the right. The word "Vascular" is overlaid in the center in a large, white, sans-serif font with a black outline. The background is a soft, out-of-focus illustration of biological tissue.

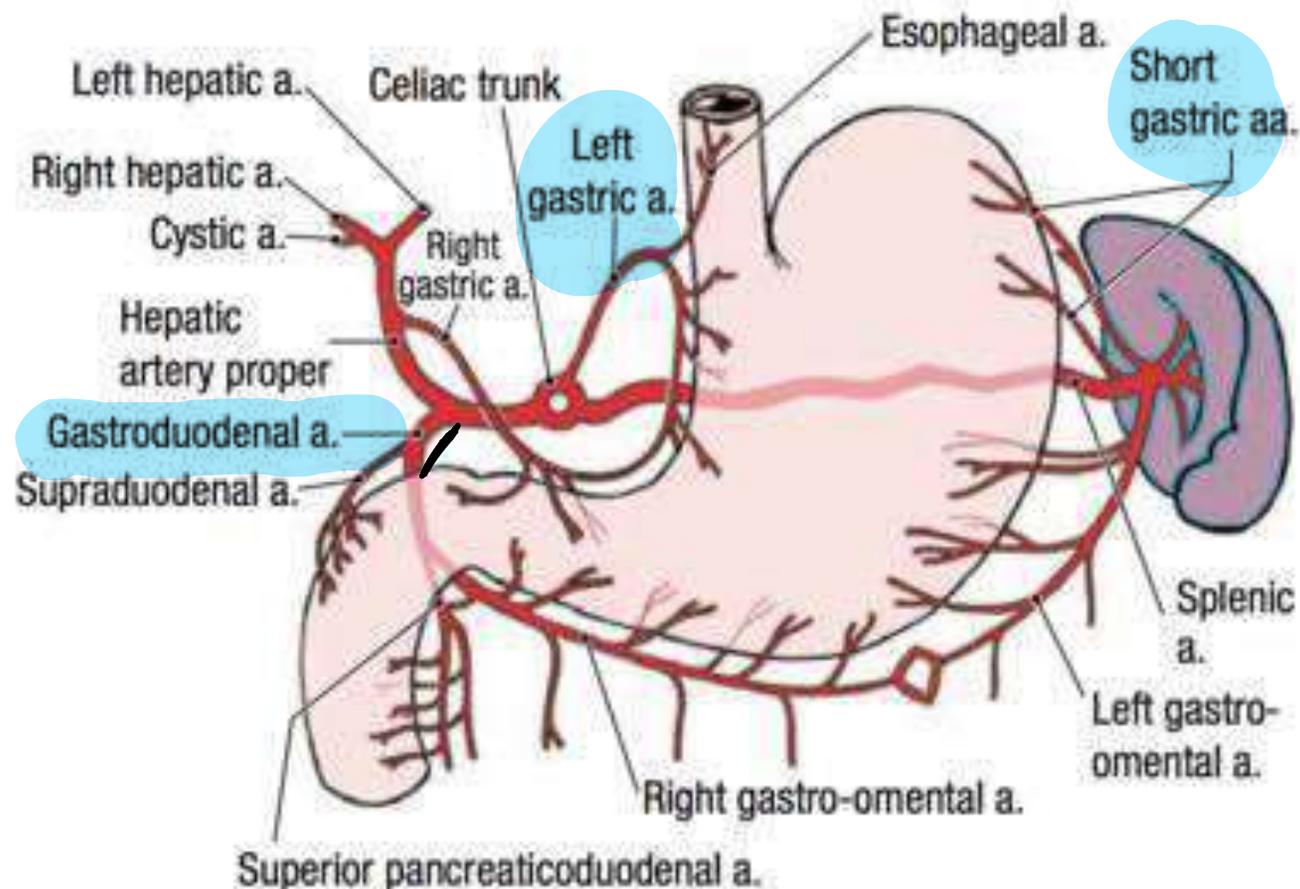
**Vascular**

- What's A:** inferior epigastric artery
- What's B:** direct inguinal hernia
- What's C:** indirect inguinal hernia
- What's D:** femoral hernia



## Q: A Question was asking about the following arteries?

- 1- Left gastroepiploic artery
- 2- Gastroduodenal artery
- 3- Short gastric arteries



**Q: Patient had hip replacement 5 days ago:**

ddx of swelling: **Q1: What is the Dx?**

DVT, cellulitis, trauma - DVT → the pt has the RF (major surgery)

**Q2: What is the Mx?**

- LMWH & Warfarin on discharge  
anticoagulant & SC LMWH or IV unfractionated heparin  
Followed by oral warfarin (total 3 months)

**Q3: Mention 4 DDx?**

- 1) DVT
- 2) Cellulitis
- 3) Lymphadenopathy, lymphatic obstruction
- 4) Chronic Deep Vein Insufficiency
- 5) Rupture of baker's cyst

**Q4: What are the complications:**

- 1) Pulmonary embolism
- 2) Ulcers (venous ulcer)
- 3) Ischemia



## Q1: What is the Dx?

- Varicose veins

*twisted enlarged veins  
caused by damage in  
the vein walls & valves*

## Q2: What is the system involved in this part (name the vessel)?

✓ - Great (long) Saphenous vein  
(Superficial Venous System)

## ✓ Q3: Name 2 modalities of Mx?

- 1) High ligation and vein stripping
- 2) Sclerotherapy

*3) laser tx    4) radiofrequency ablation*

## Q4: Mention 2 complications?

- 1) Ulcers
- 2) Bleeding
- 3) Thrombophlebitis
- 4) Discomfort, pain



**Q5: Mention 2 minimally invasive procedures to do for this condition?**

- 1) Sclerotherapy
- 2) Radiofrequency Ablation
- 3) Endovenous Laser Ablation

**Q6: Best imaging test?**

- Doppler US or Venogram

**Q7: How to determine the level of defect in the varicose veins?**

- ~~Turncate~~ test Trendelenburg test (Tourniquet)



## Q1: What is this?

- AV shunt

*irregular connection  
between  
artery &  
vein*

## Q2: Done in patients that undergoes what?

- Hemodialysis

## Q3: What is the complication seen in the picture?

- Aneurysm



Q: A 60 year old female with CKD on hemodialysis:

Q1: What is the following complication?

- Pseudoaneurysm

Q2: Mention other complications that may occur? (۲)

- Thrombosis, Steal syndrome, CHF, infection

syndrome occurs when  
the subclavian artery stenosed & occluded



pooling of blood, caused by injury to BV  
caused usually by catheter

in this case

pt on

dialysis

فصكن بيبي

**Q: Patient complained of abdominal pain and a pulsatile mass:**

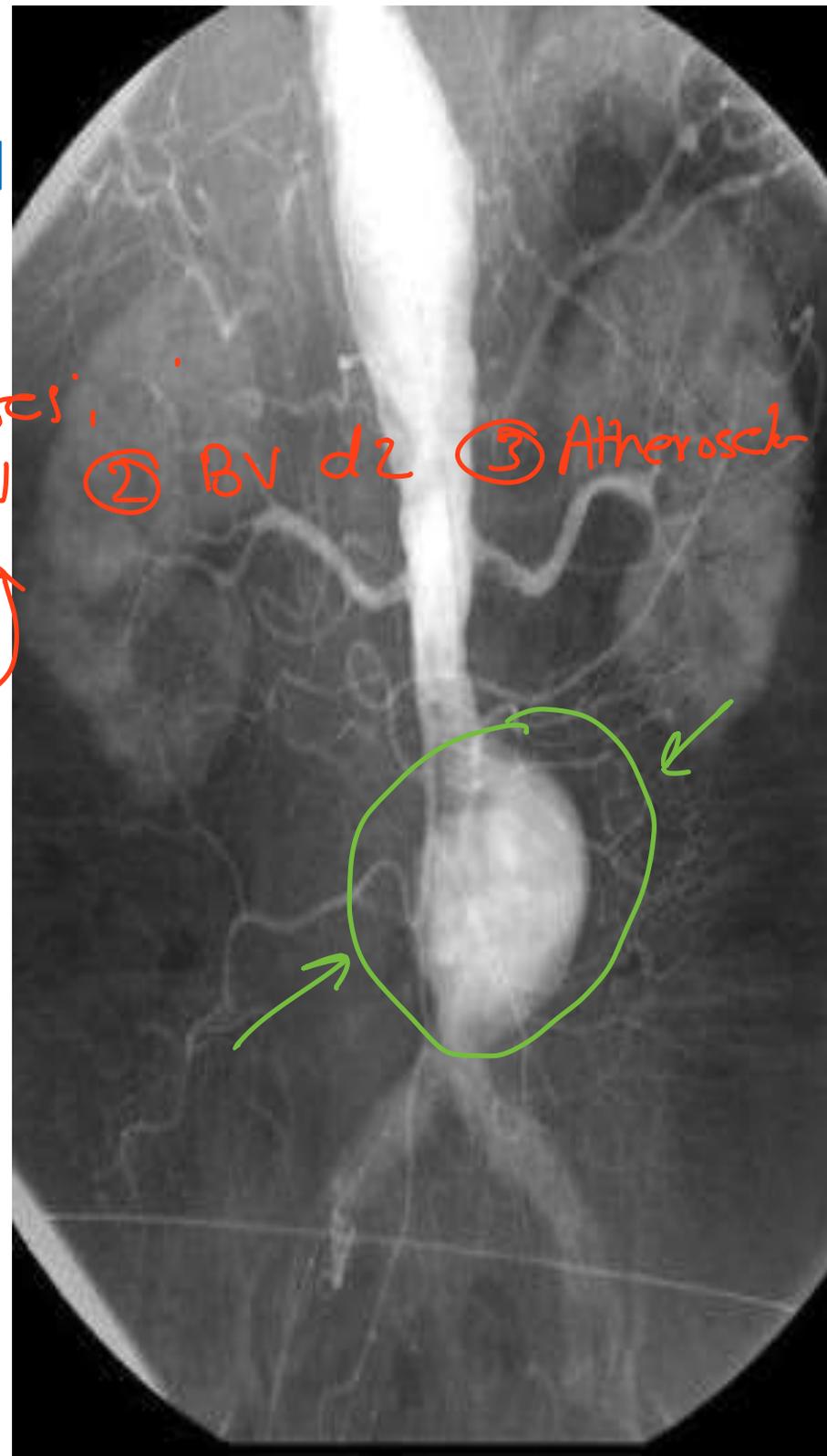
**Q1: Name of this study?** *causes:*  
- Angiogram ① HTN

**Q2: What is this pathology and where is its location?**

- AAA (Abdominal aortic aneurysm) near the bifurcation

**Q3: Mention 2 lines of Mx?**

- 1) Open surgical repair
- 2) Endovascular surgery



**Q1: Name of this study?**

- 3D angiography

**Q2: What is your Dx?**

- AAA

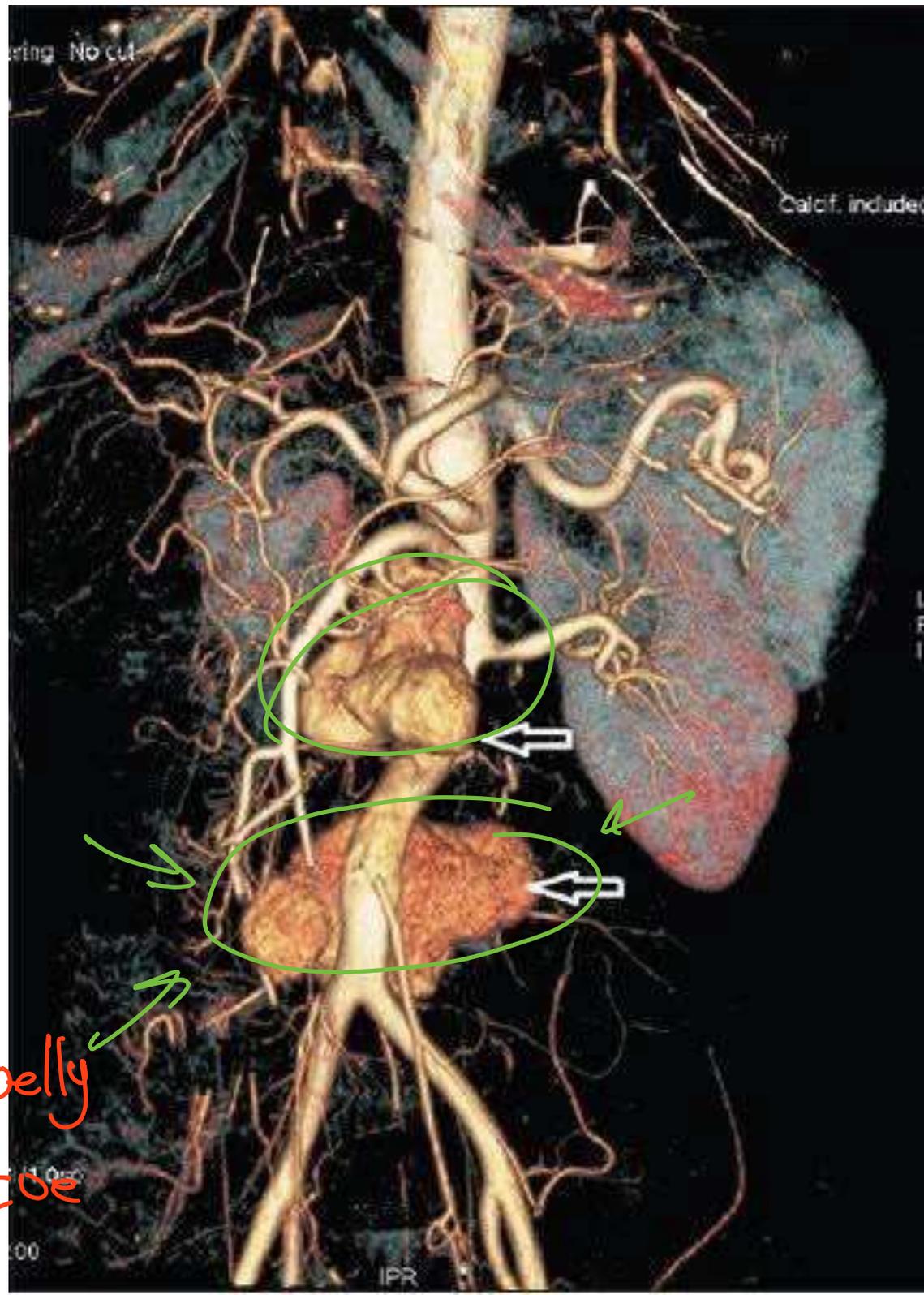
pt comes with

① belly pain & chest pain

② pulsating feel in the belly

③ black/blue painful toe

④ dysphagia



**Q: A patient with a hx of atrial fibrillation, presented with a sudden severe abdominal pain:**

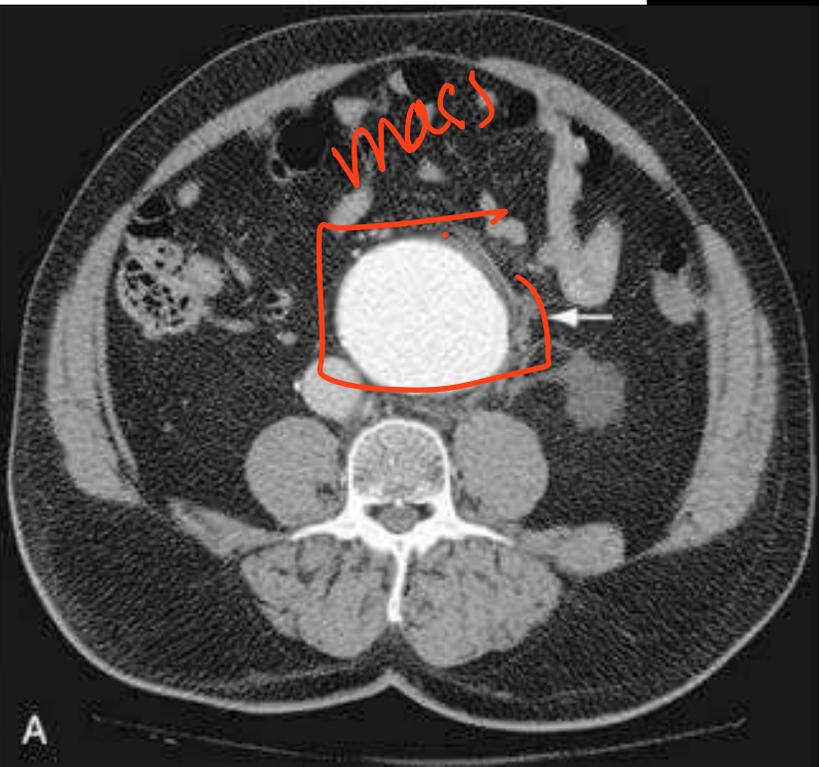
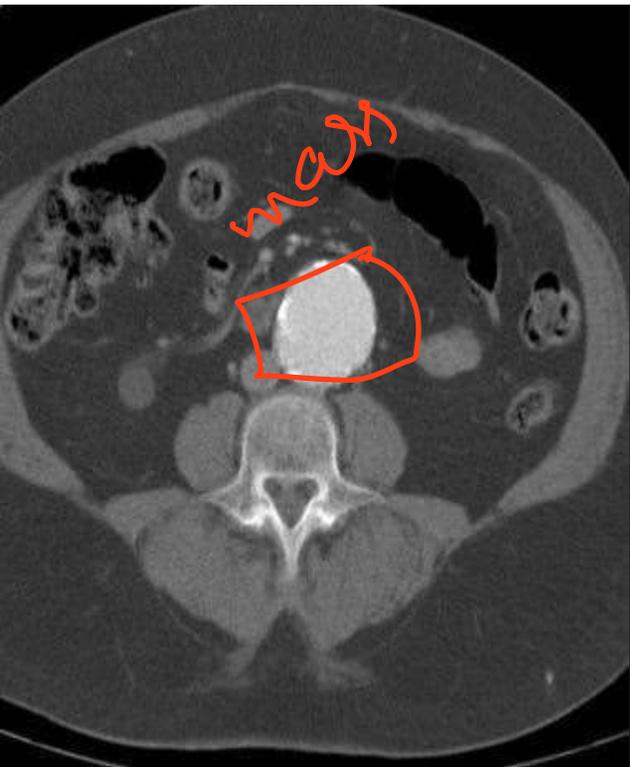
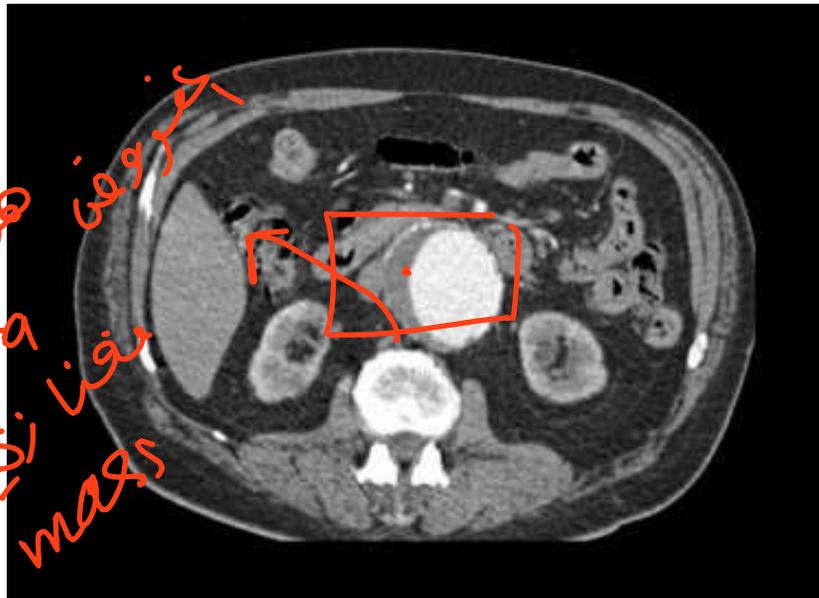
**Q1: Name of this study?**

- CT Angiogram

**Q2: Dx?**

- AAA (Abdominal aortic aneurysm)

based on the Hx: Rupture AAA is more accurate

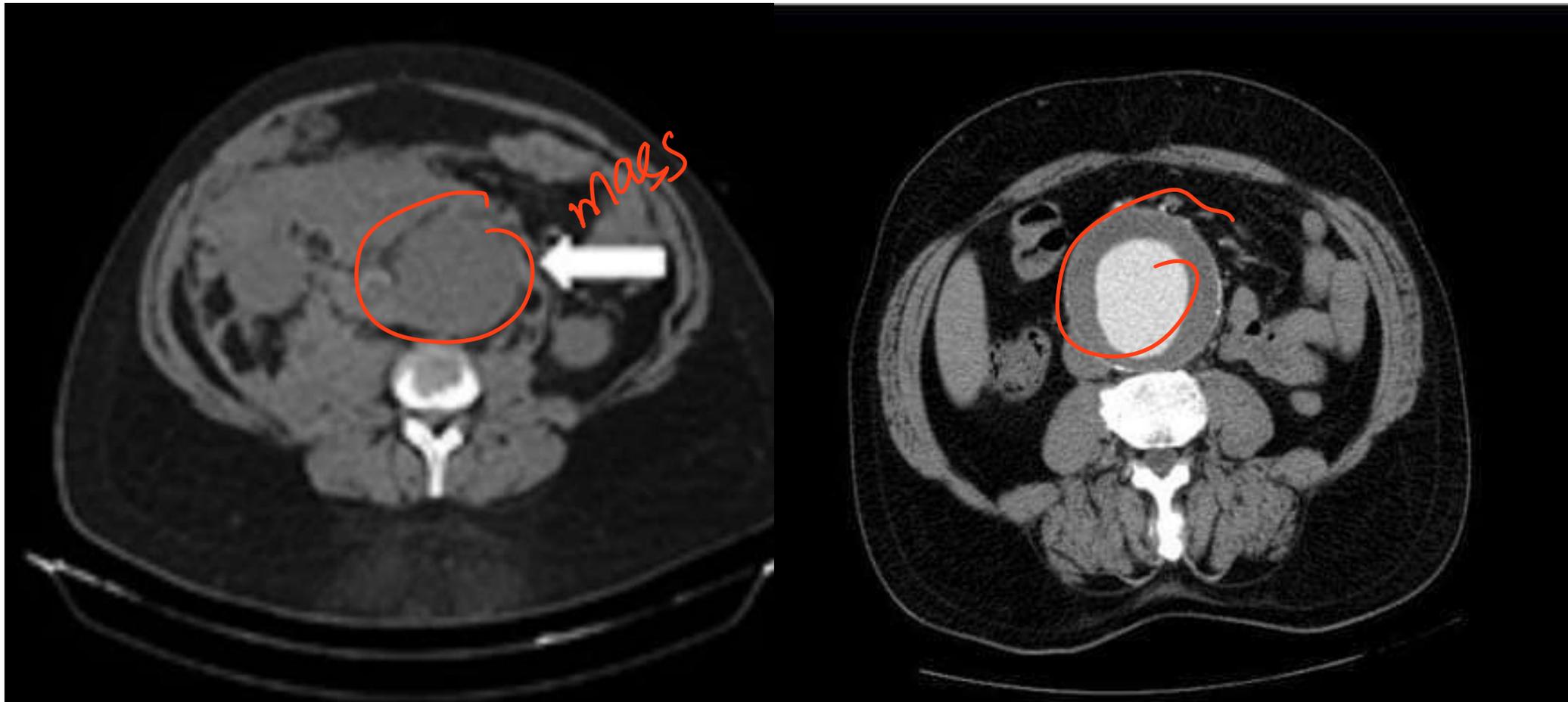


**Q1: What is the structure?**

- Abdominal Aorta

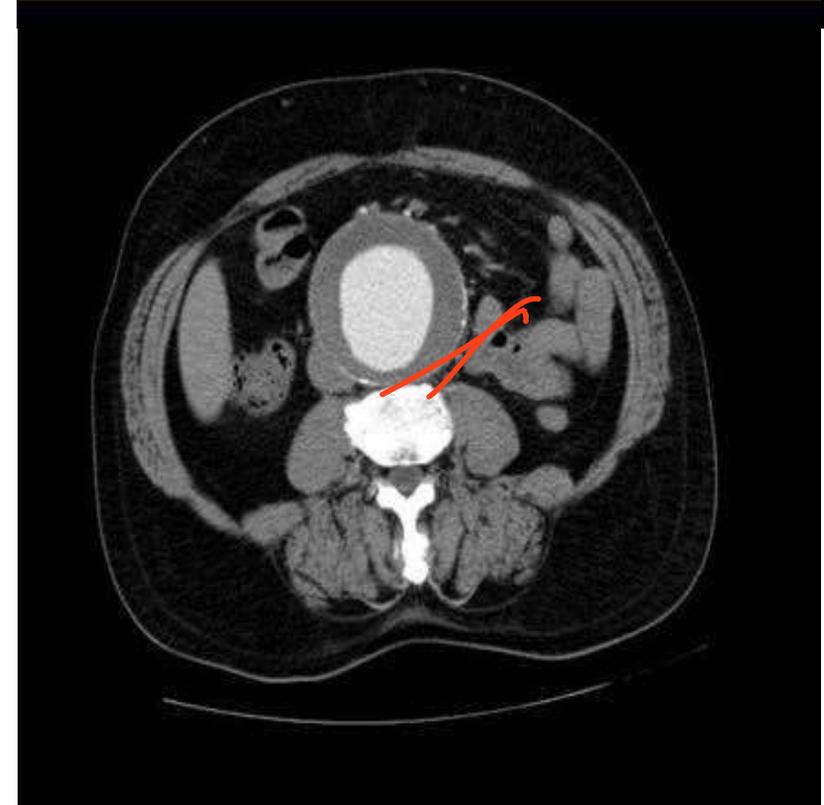
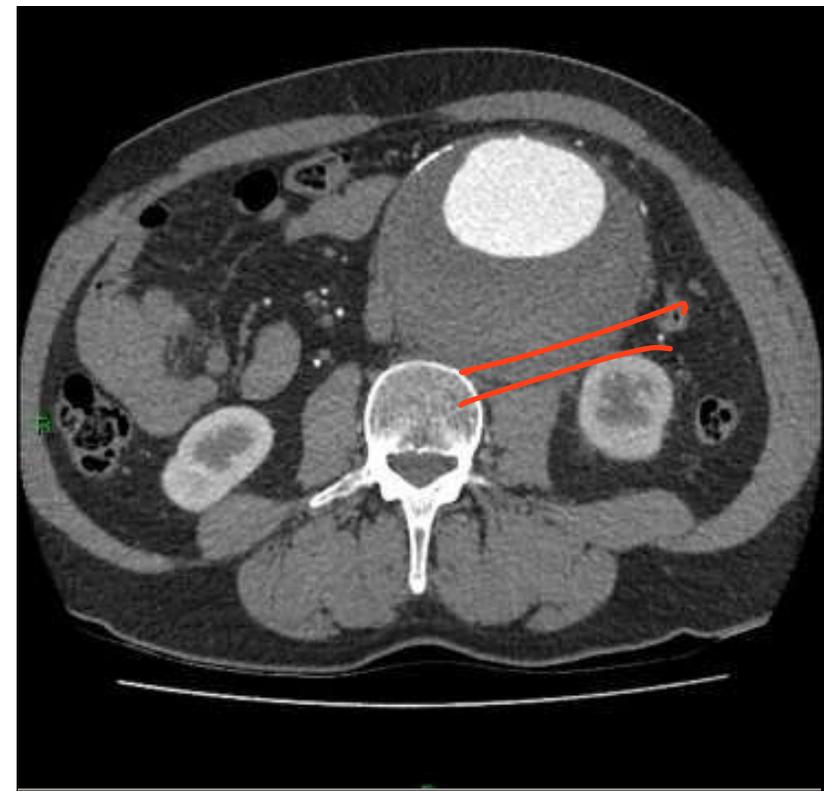
**Q2: What's the best repair method for this?**

- Stent

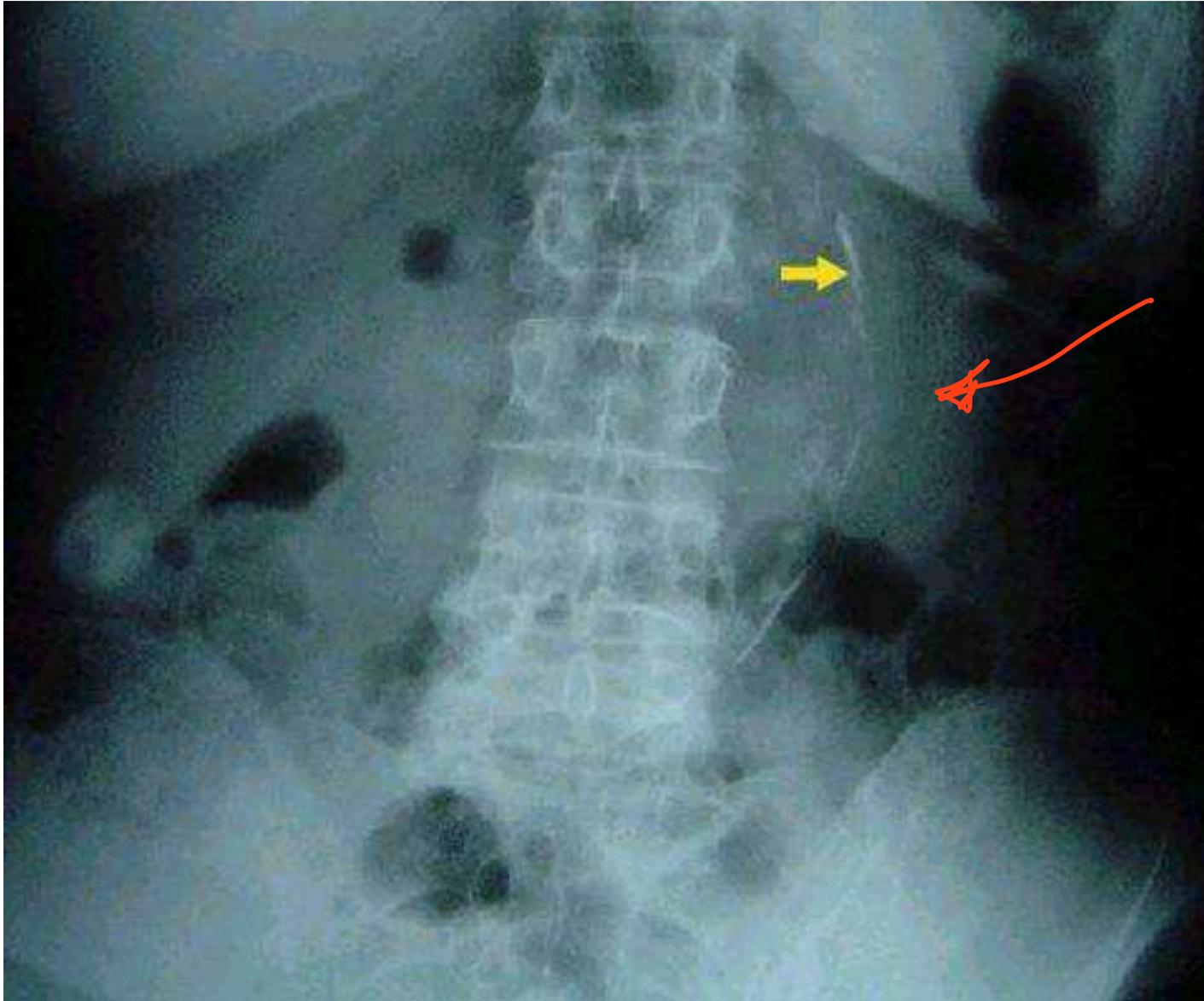


### Q3: What is the Mx (2 Mx modalities)?

- Medical or Surgical according to the size
  - 1) Endovascular repair
  - 2) Open repair



Abdominal x-ray with evidence of the **calcified edge** of the **abdominal aortic aneurysm**.



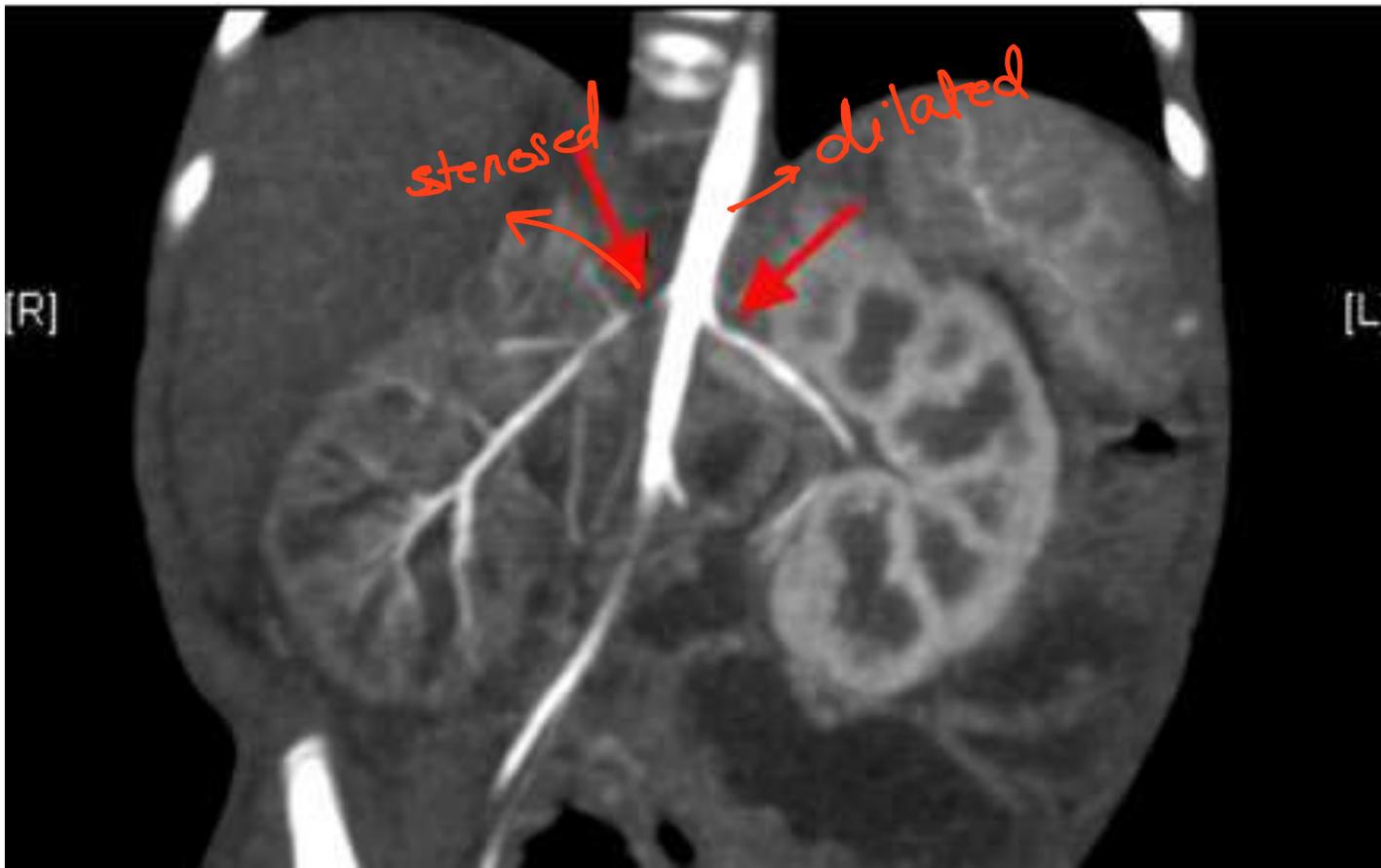
**Q: This is a CT Angio for the renal arteries:**

**Q1: What is the Dx?**

- Bilateral Renal Artery Stenosis

**Q2: What is your Mx?**

- Renal Angioplasty & Stenting



Kussmaul sign

Q: After RTA, the patient present with dilated veins?

Q1: Mention 2 causes?

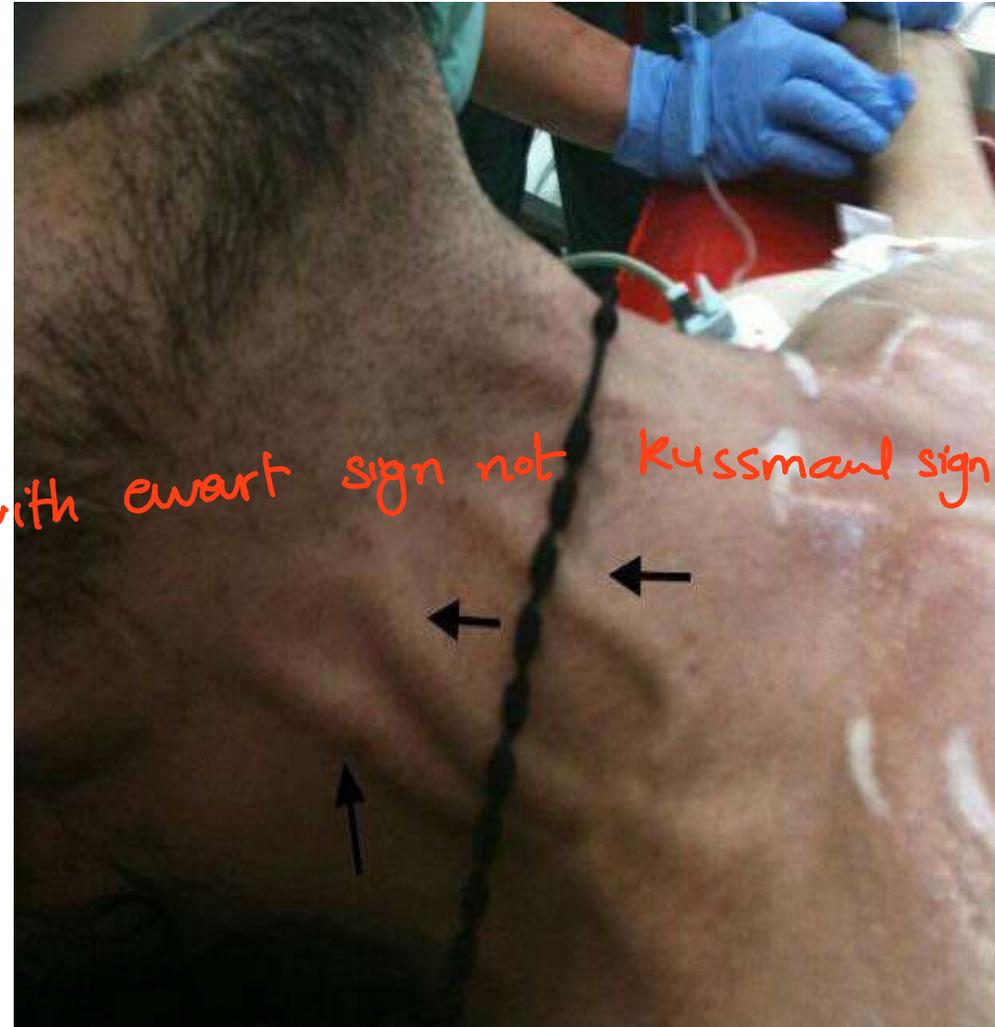
- 1) Pericardial Effusion
- 2) Cardiac Tamponade

seen with ewart sign not Kussmaul sign

airway  
RTA  
Tension pneumothorax  
سواء اجاب بـ تـنـشـيـر  
الـرئـة  
RTA

Q2: What is your Mx?

- Pericardiocentesis



**Q1: What is the Dx?**

Cardiac Tamponade

**Q2: What is the C/P that the patient come with?**

- 1) Beck's triad :  
hypotension  
increased JVP

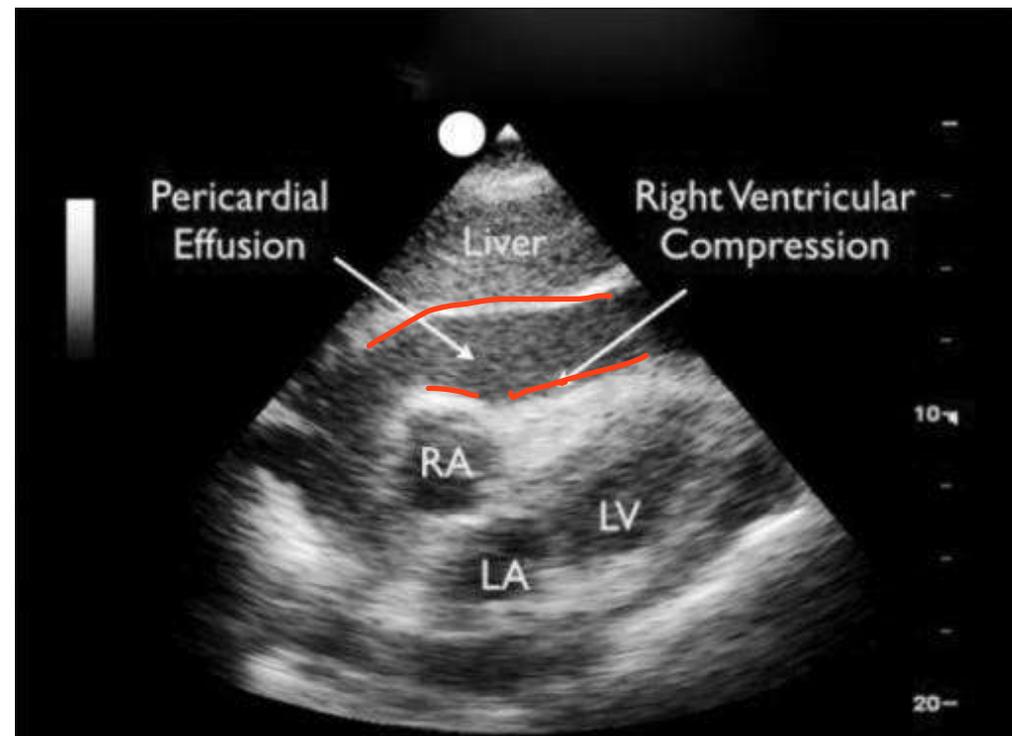
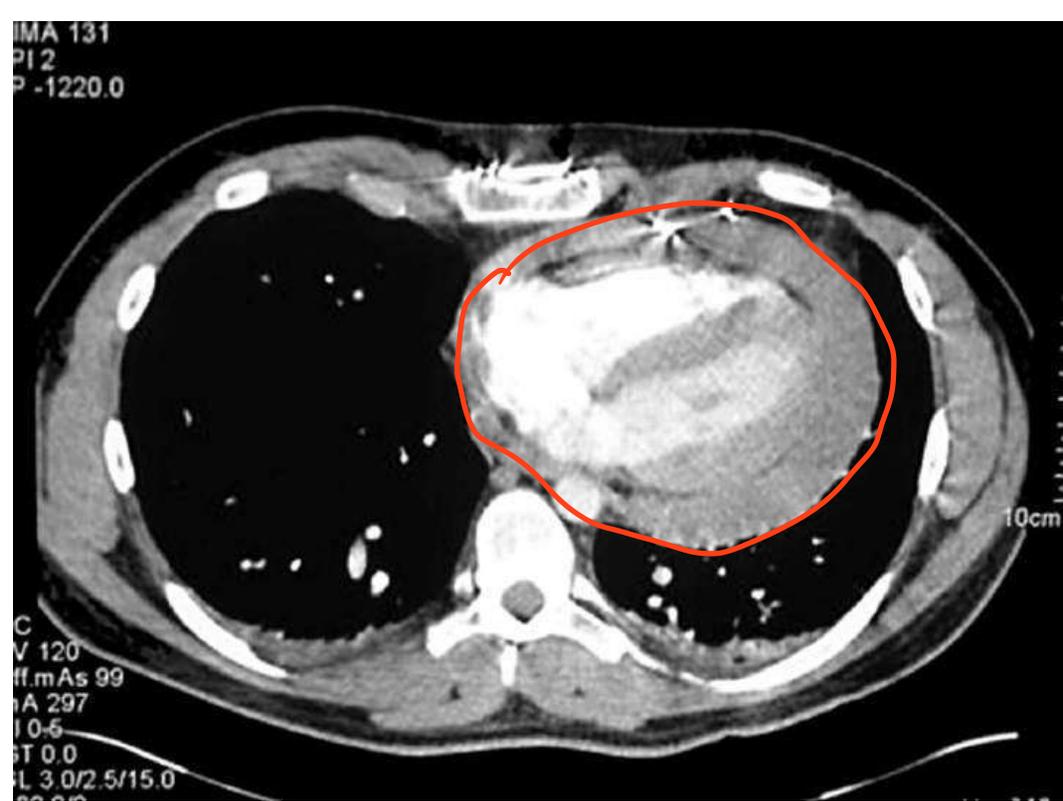
muffled heart sounds.

- 2) Pericardial effusion

- 3) Kussmaul's sign.

**Q3: What is the Mx?**

immediate decompression via  
needle pericardiocentesis.



**Q: Post-RTA patient came to ER, he was hypotensive with SOB:**

**Q1: What is the pathology?**

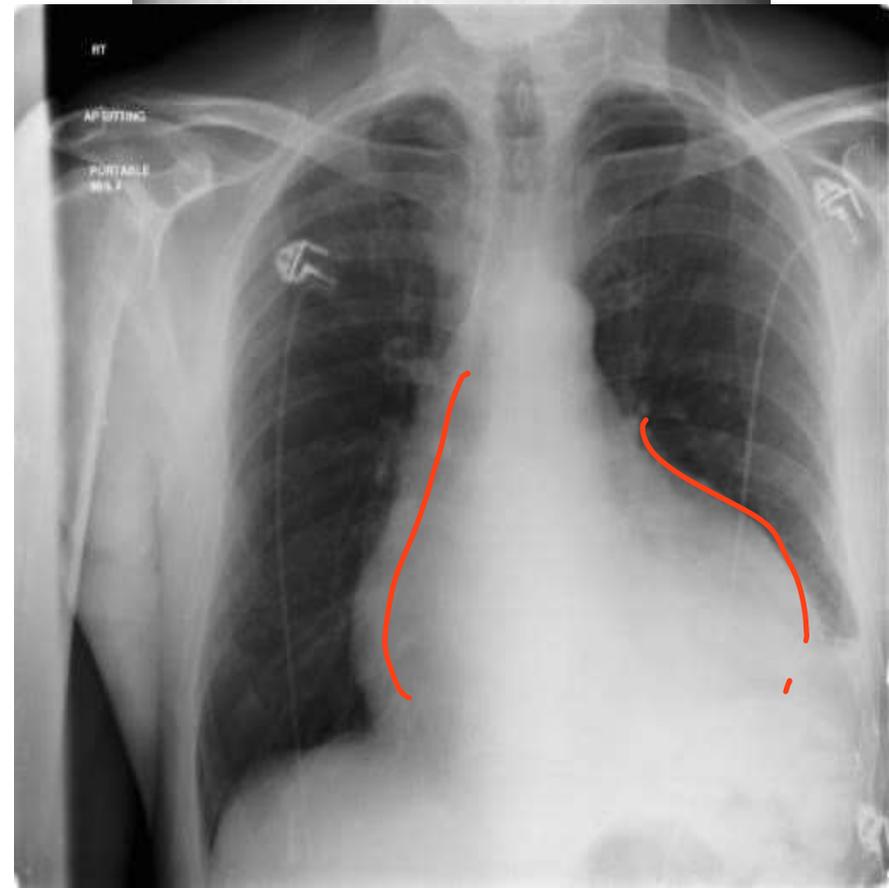
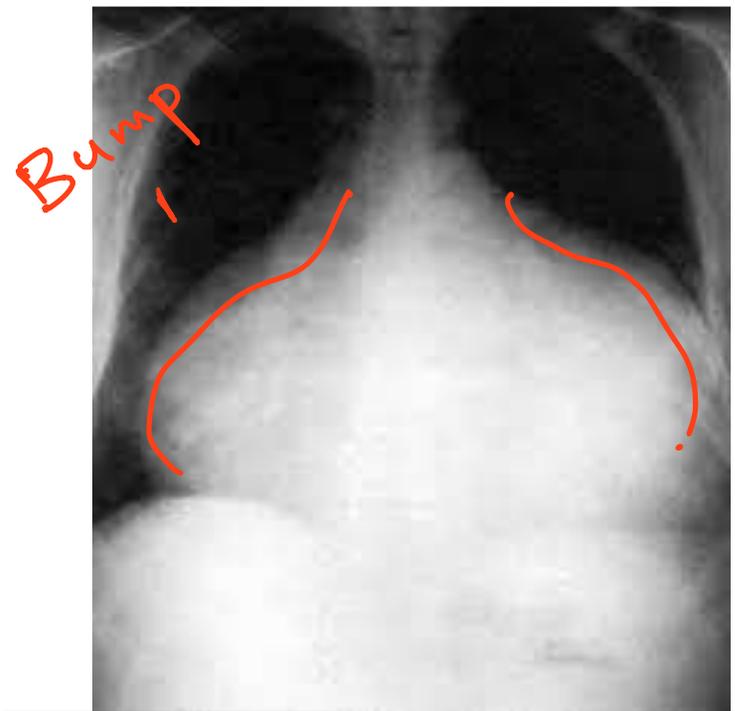
- Cardiac tamponade

**Q2: What is the next step in Mx?**

- Pericardiocentesis

**Q3: What is the consequence for this pathology?**

- Obstructive shock
- Pulmonary Edema
- Beck's Triad



\*

Q: a Pt experienced sudden severe pain radiating to the back:

Q1: What is the X-Ray finding?

Widened Mediastinum

Q2: What is the Dx?

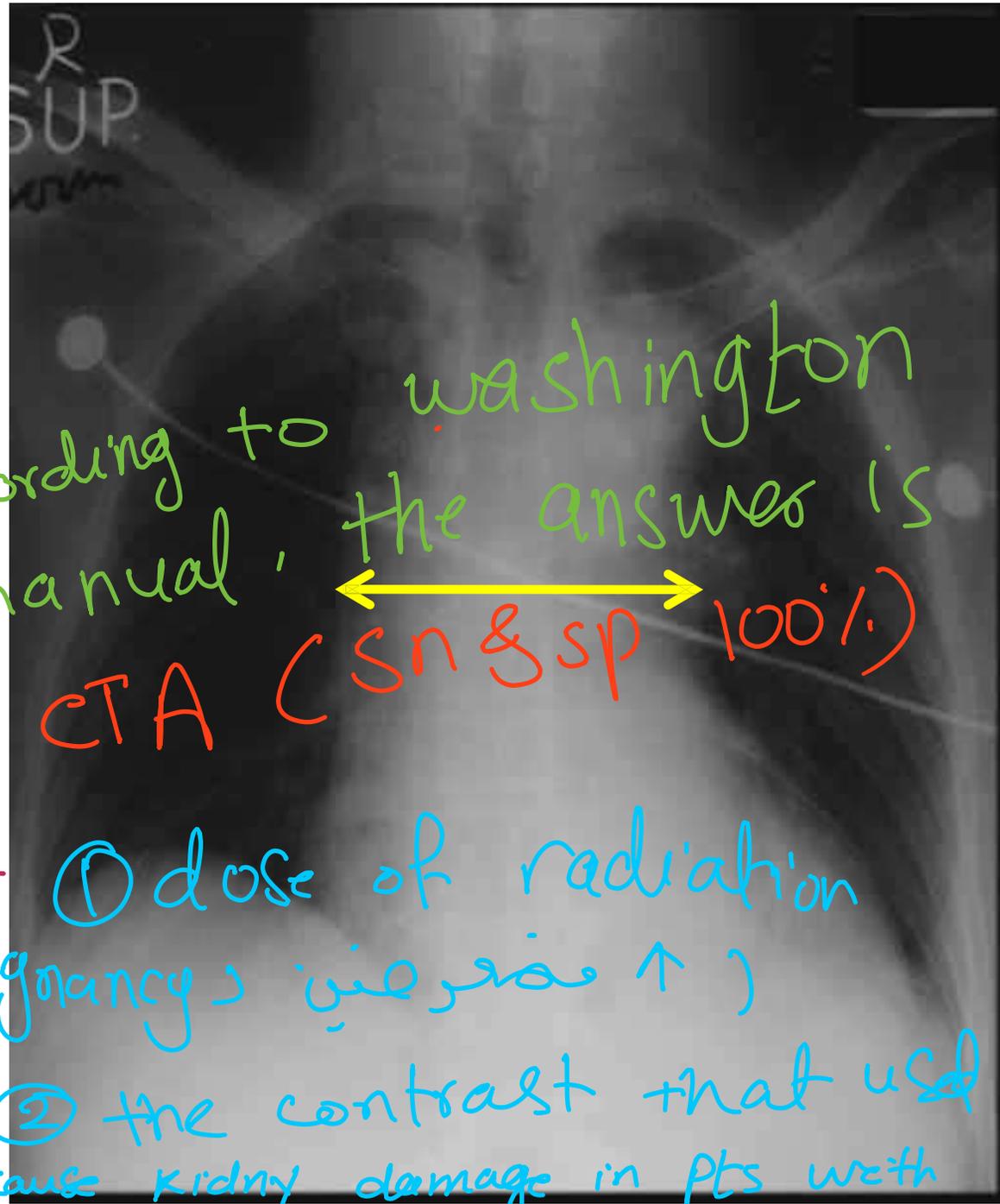
Aortic dissection

Q3: What is the gold standard for Dx? And what is the disadvantage for it?

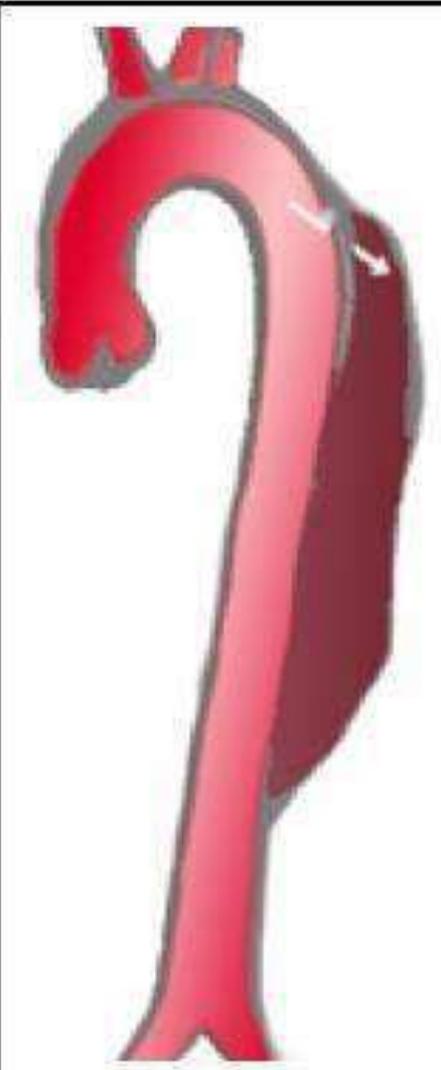
Aortography, time consuming

Q4: What is the Mx:

- 1) Stanford A: Surgical
- 2) Stanford B: Medical (control BP)



## Classification of aortic dissection

			
Percentage	60%	10–15%	25–30%
Type	DeBakey I	DeBakey II	DeBakey III
	Stanford A ( <u>Proximal</u> )		<u>Stanford B</u> (Distal)



# Mitral stenosis

## X-ray findings :

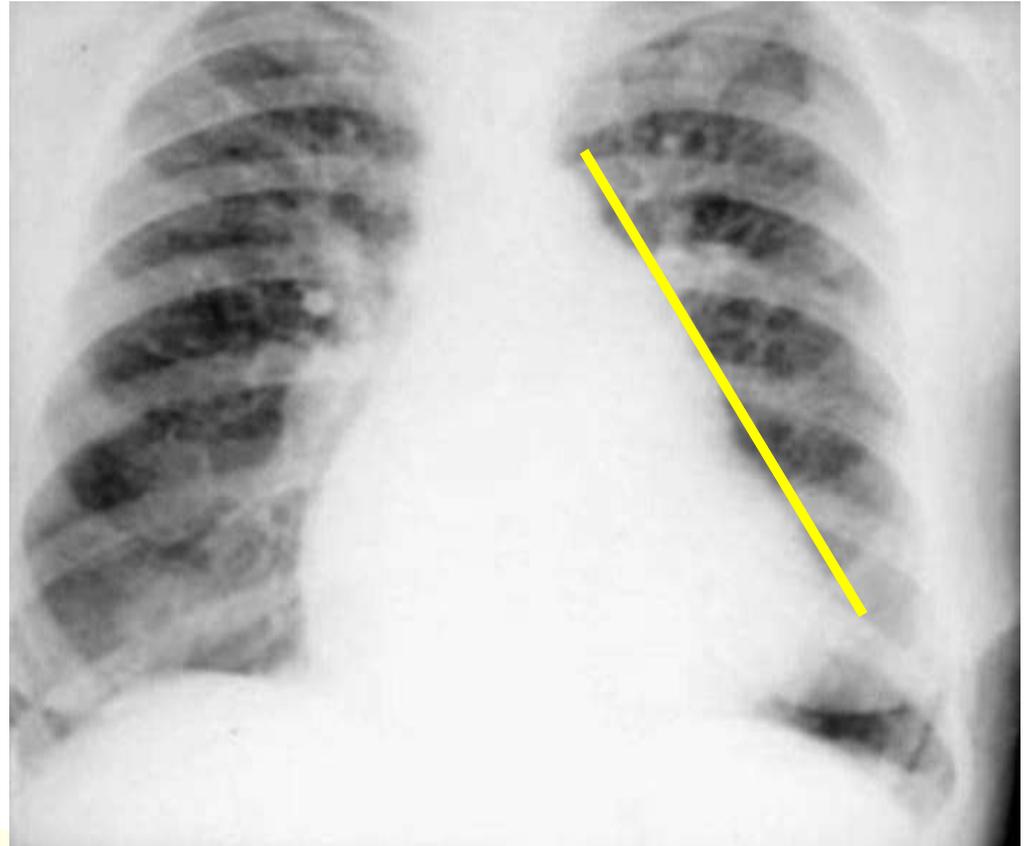
- Enlarged left atrium.
- **Straight line sign.**

## Diagnostic tests :

- Echocardiogram.
- Catheterization.

## Mx:

- Open heart surgery.
- Balloon valvoplasty.
- Valve replacement.



Mitral Stenosis



Source: <http://phil.cdc.gov>



## Q1: What does the arrow indicate?

Cervical rib

## Q2: What is your concern?

It can cause a form of thoracic outlet syndrome due to compression of the lower trunk of the brachial plexus or subclavian artery.

## Q3: What might the pt complain of?

- 1) parasthesias & numbness in the upper part mainly usually in 90% of cases are in the ulnar distribution.
- 2) Weakness manifested by difficulty grasping or holding a pen , this is a result of arterial and or neural compression.
- 3) The hand is usually cold.





**Q1: What is this sign?**

Raynaud's phenomenon.

**Q2: What is the most likely Dx?**

Buerger Disease

**Q1: What is the Dx?** Venous Ulcer

**Q2: What is the pathophysiology?**

- Blood stasis and increased Pressure inside the veins due to venous valves insufficiency

**Q3: if this happened after 5 days of surgery what is the main cause?**

DVT

**Q4: Risk of transformation to?** SCC

**Q5: Name 2 causes?**

- venous insufficiency and stasis (as DVT, varicose veins)

**Q6: What is the sign?**

- Lipodermatoseclerosis



**Q7: What is the most common site?**

Most Common site is lower 1/3 of the leg just above the medial malleolus.



**Q8: Name 2 points that goes with your Dx?**

- 1) Location: lower medial aspect of the leg
- 2) Hyperpigmentation around the ulcer



# Venous Ulcer Characteristics :

## where ?

\*Lower 1/3 of leg \*gaiter area \*anterior to medial malleolus. ✓

## cause?

Commonly a history of:

① \* (DVT) ② \* Obesity \* Calf muscle pump function deficits

\* Valve incompetence in superficial perforating veins.

## description?

\*Ulcer has uneven edges ① \* Ruddy granulation tissue ② \* No dead tissue ③.

④ \* Reddish brown pigmentation (Hemosiderin) \* Evidence of healed ulcers \* Edema that may leak and cause maceration, varicose eczema, itchy skin and scale

\* Dilated and tortuous superficial veins \* Leg may be warm \* Hair on leg  
\* Normal leg and foot pulses.

## pain?

\* Moderate to no pain at all \* Pain if present is eased by raising the leg



**Q: A 75 year old male, heavy smoker, presented with this lesion.**

**Q1: Identify the lesion:**  
ischemic arterial ulcer

**Q2: Give two symptoms which might be associated with the condition:**

- 1) claudication
- 2) rest pain



# Arterial Leg Ulcer Characteristics

where?

\*At tips of toes or between toes \*Over phalangeal heads

\*Above lateral malleolus, over the metatarsal heads, on the side or sole of feet.

\* MC distal end of the limbs

cause?

Commonly a history of:

\*Aging \*Diabetes \*Arteriosclerosis \*Smoking \*Hypertension.

description?

\*Deep pale base \*Well defined edges \*Black or necrotic tissue

\*Minimal / no hair \*Thin, dry and shiny skin \*Thickened toe nails \*Leg may be cool \*Leg becomes pale when elevated \*May have neuropathy

\*Nil or diminished leg and foot pulses. \* Punched out-apperance

Pain?

\*Very Painful \*Pain is reduced by lowering the leg to a dependent position.

\* Not palpable pulses



**Q1: What is the most probable cause for this patient's condition?**

Lower Limb Ischemia

**Q2: What is the best imaging test to put a treatment plan?**

CT Angio, Angiogram,  
Doppler US



## Q1: What is the pathology?

- Gangrenous necrosis of the big toe

## Q2: Mention 4 signs of peripheral ischemic disease?

- 1) Pale
- 2) Hair loss
- 3) Cold
- 4) Pulselessness



Remember the 6 P's of peripheral vascular disease:

**P**allor

**P**ain

**P**aresthesia

**P**aralysis

**P**ulselessness

**P**oikilothermia

*claudication*

*may be the dx is related to ischemic arterial  
ulcer/ LL ischemia*

**Q: A patient walks 400 meters before feeling pain and having to rest, his job requires him to walk for 1 kilometer everyday, what do you do for this patient?**

- a) Lifestyle modification
- b) Medical therapy
- c) Bypass
- d) Angiogram **(correct answer)**