

Emergency Vascular Surgery

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Acute Limb ischaemia

The 6 Ps



Acute Limb ischaemia

- Pain
- Pallor
- Perishing Cold
- Pulseless
- Parasthesia
- Paralysis



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**Surgical
Emergency**



Clinical manifestations of the patient in the last slide would include:

- A. Involuntary muscle contraction indicates that restored flow cannot save the limb
- B. Paraesthesia would be noted in a classical dermatome distribution
- C. Audible Doppler at the ankle excludes critical limb ischaemia
- D. Loss of sensation to deep pain is one of the earliest signs

Clinical manifestations of the patient in the last slide would include:

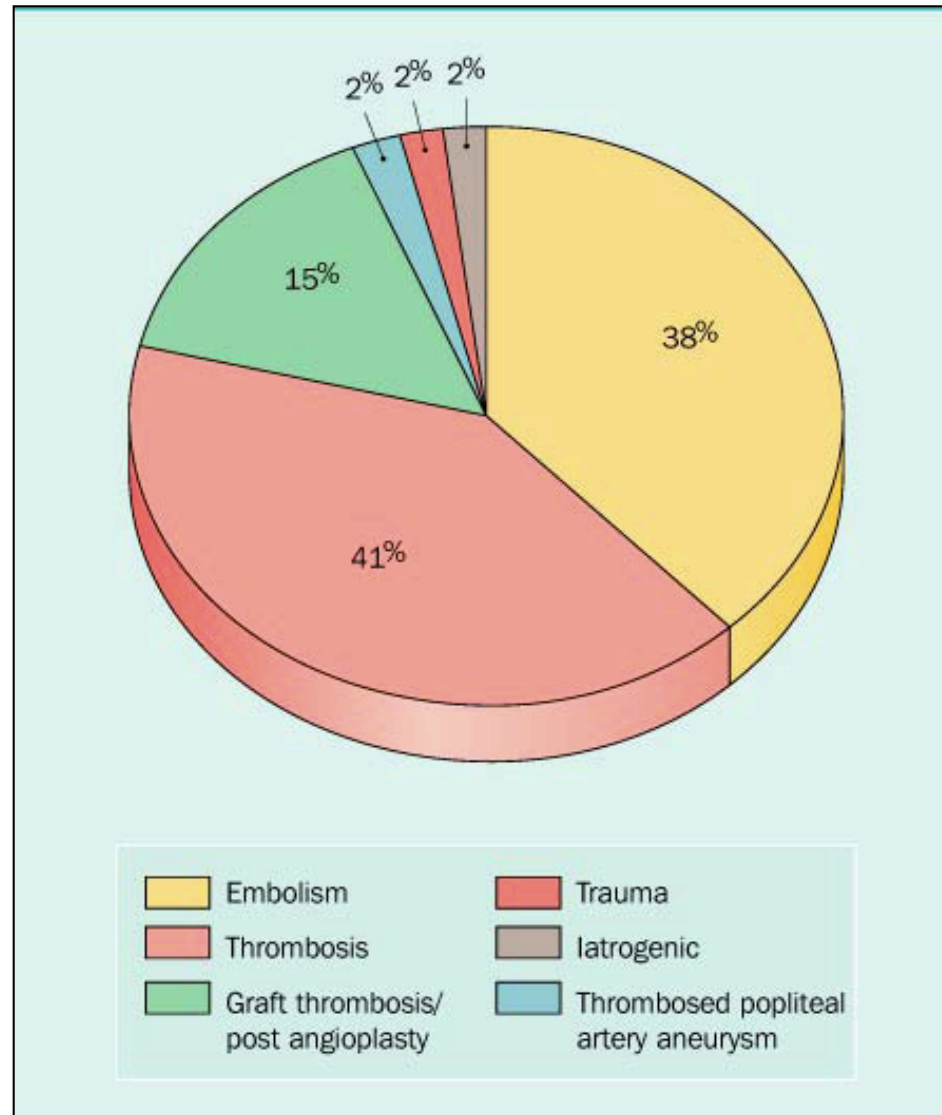
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Acute Limb ischaemia

- **Viable** No neurology, audible doppler at ankle
- **Threatened** Sensory loss, tense calf, no doppler
- **Dead** Complete neurological deficit, fixed mottling



Acute Limb ischaemia



Acute Limb ischaemia

Embolic

- Sudden
- No Hx PVD
- Opposite limb normal
- Identifiable source:—80%
AF, 10% post MI, 10%
aneurysm

Plaque thrombosis

- Sudden/less acute
- Claudicant
- Abnormalities in other
limb

Acute Limb ischaemia

Initial Ix

- FBC, Clotting, G+S
- ECG
- CXR
- Cardiac enzymes
- ABPI
- Duplex
- Angiogram

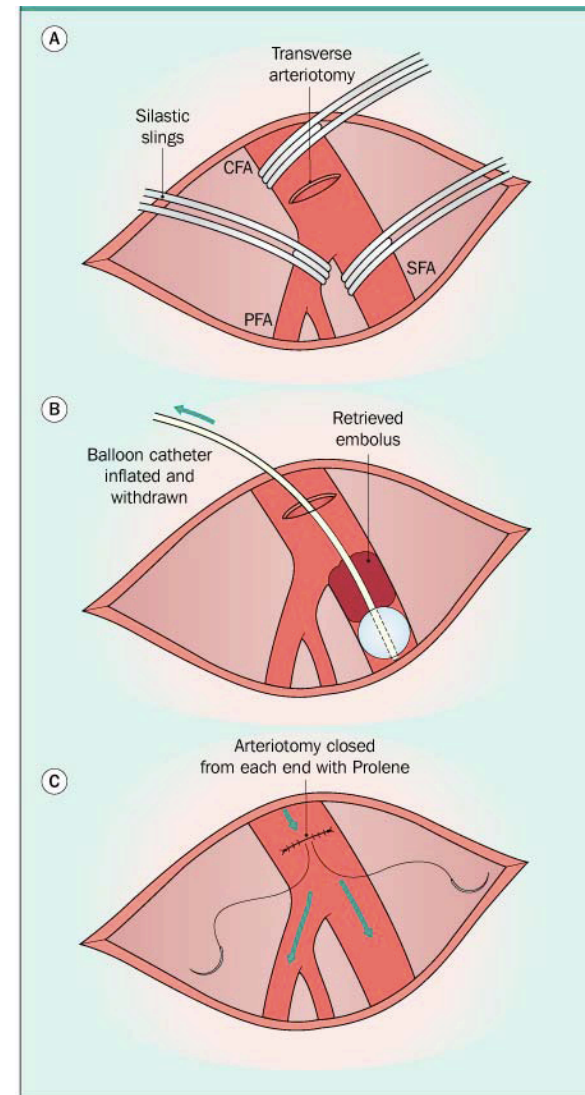
Initial Tx

- Analgesia
- Heparin
- Catheter
- IV access + fluids
- Consent

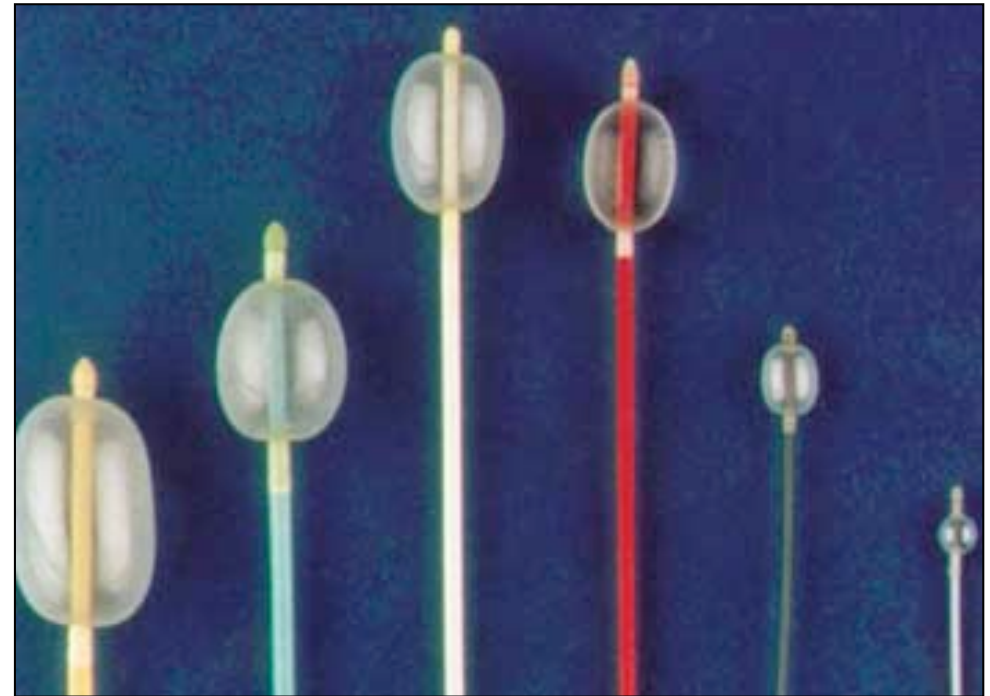
Acute Limb ischaemia – Embolic/Thrombotic



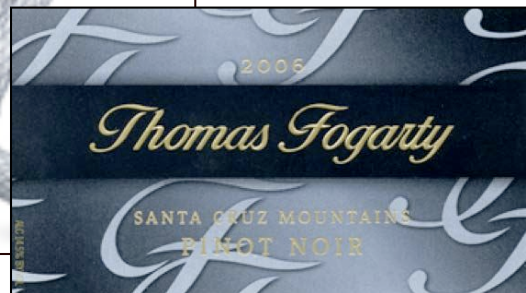
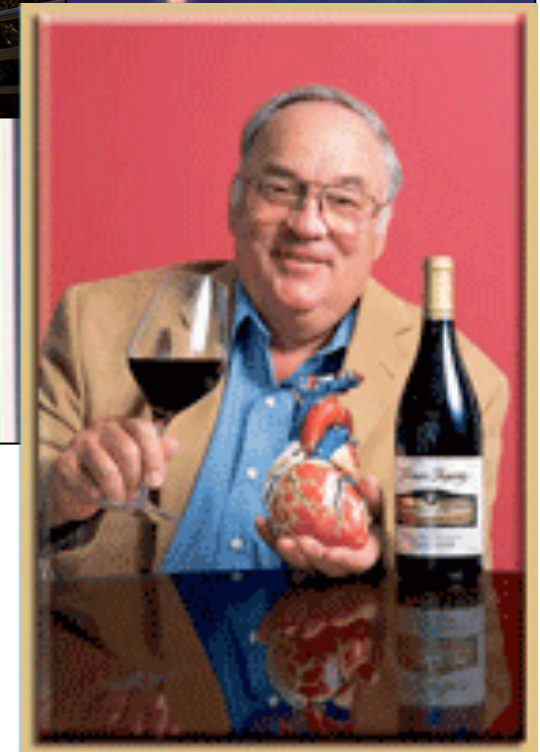
Embolectomy +/- fasciotomies
Thrombectomy



Thomas Fogarty



Thomas Fogarty



Which of the following statements about acute arterial occlusion today is not true?

- A. Most arterial emboli originate in the heart as a result of underlying cardiac disease
- B. Surgical treatment can usually be avoided if the lesion is diagnosed early
- C. It is usually due to atherosclerotic disease
- D. It can be treated under local anaesthesia

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Which of the following constitutes a cardiac cause for arterial emboli?

- A. Myocardial Infarction
- B. Atrial Fibrillation
- C. Ventricular Aneurysm
- D. Rheumatic Heart disease
- E. All of the above

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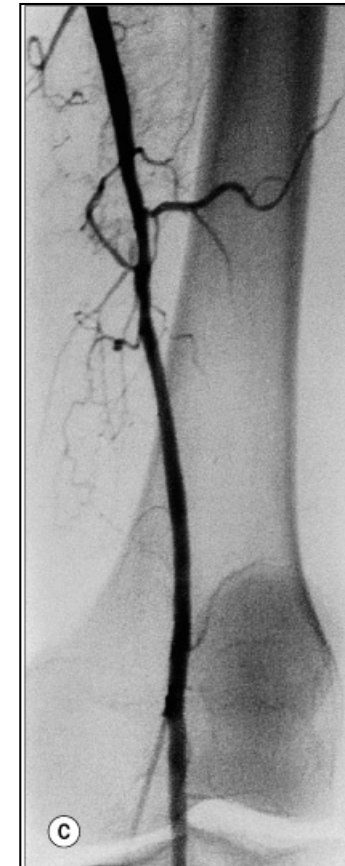
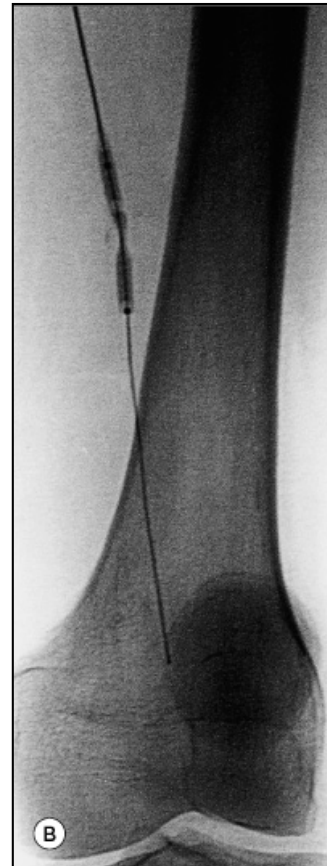
Which of the following is the least reliable indicator of successful thrombo-embolectomy?

- A. Vigorous back-bleeding after removal of embolic/ thrombotic material
- B. Angiographic evidence for patency of all runoff vessels
- C. Normal distal pulses
- D. Return of normal skin color and temperature

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Acute Limb ischaemia - Thrombolysis



Thrombolysis

Which of the following statements about popliteal artery aneurysms is correct?

- A. They are the least common site of peripheral artery aneurysms
- B. For a patient with an abdominal aortic aneurysm the risk of a popliteal aneurysm is approximately 50%
- C. For a patient with a popliteal artery aneurysm the risk of a contralateral popliteal aneurysm is approximately 50%
- D. Popliteal artery aneurysms most commonly present with local symptoms secondary to compression of the adjacent vein/nerve

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What is the most likely aetiology?

- A. Infective endocarditis
- B. SFA occlusion
- C. Abdominal aortic aneurysm
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**The following must be included in the management.
Which statement is incorrect?**

- A. Inform Blood Bank – Massive Transfusion Protocol
- B. Aggressive Fluid Resuscitation
- C. Obtain imaging if cardiovascularly stable
- D. Escalate to appropriate Vascular Surgeon/Interventional radiologist
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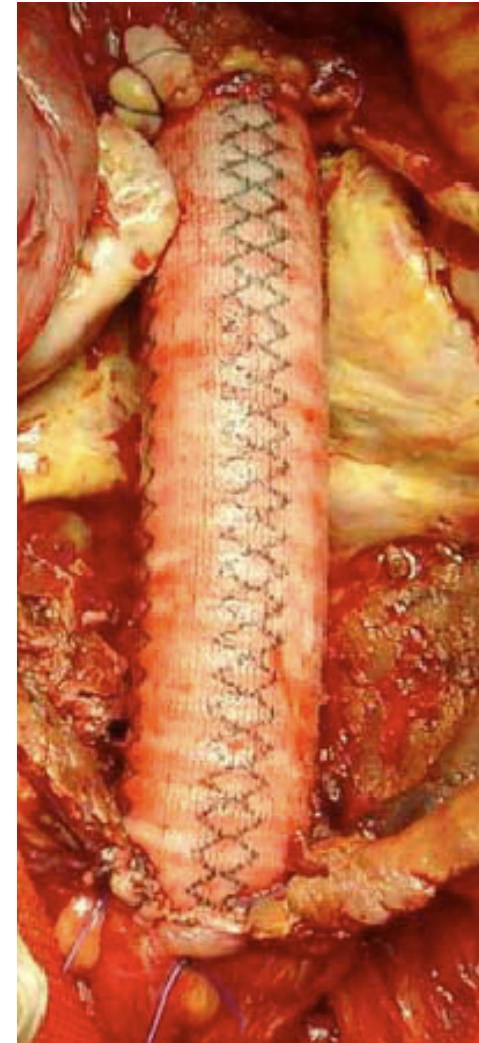
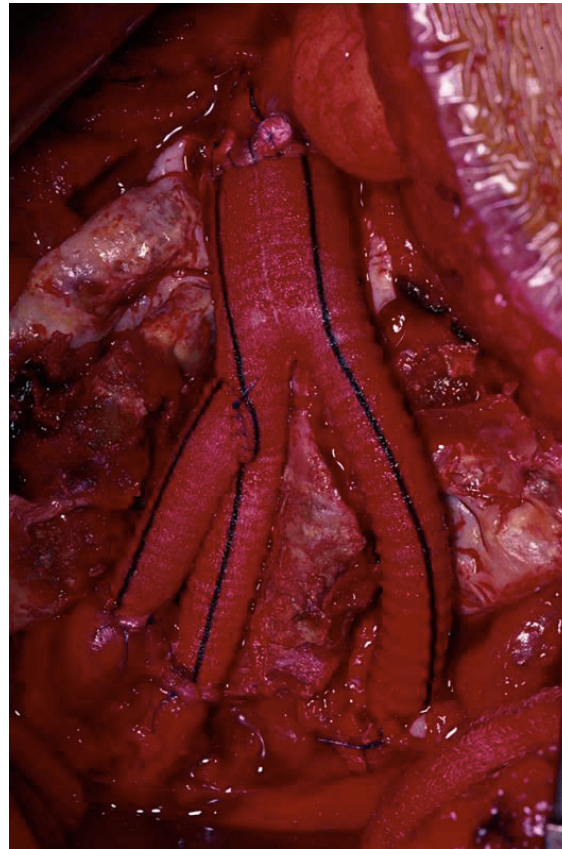
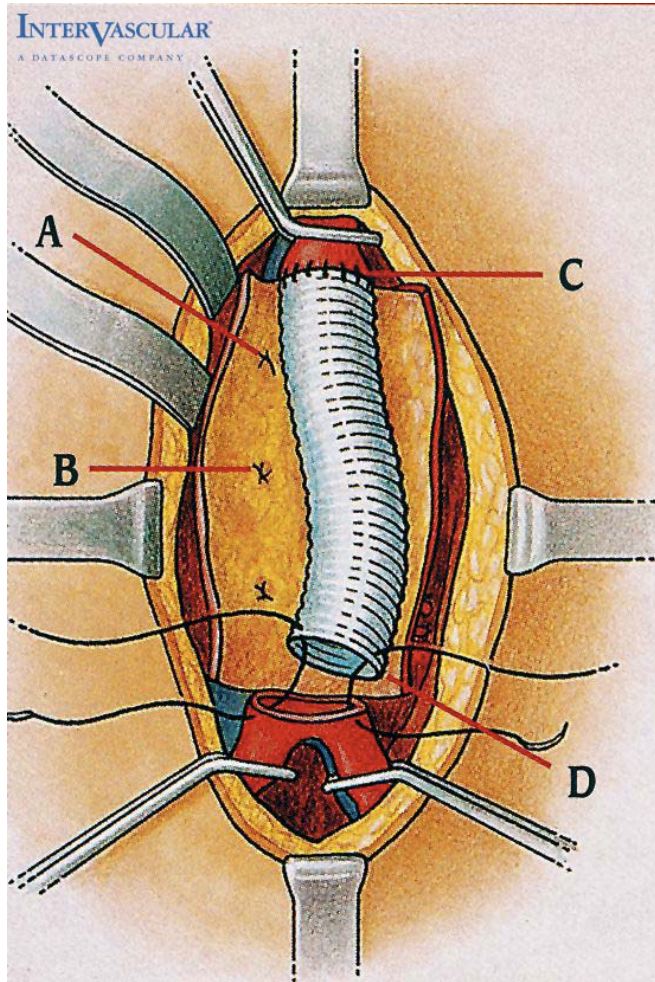
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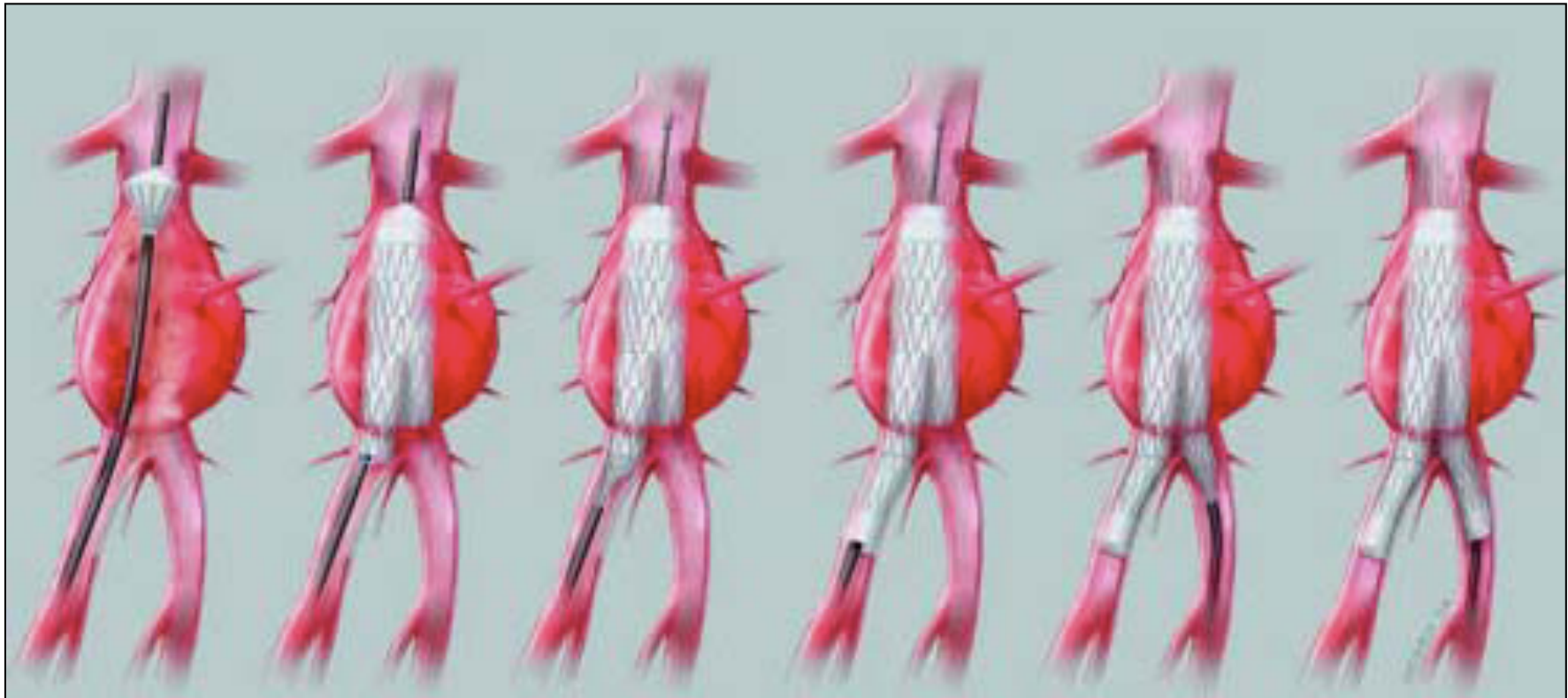
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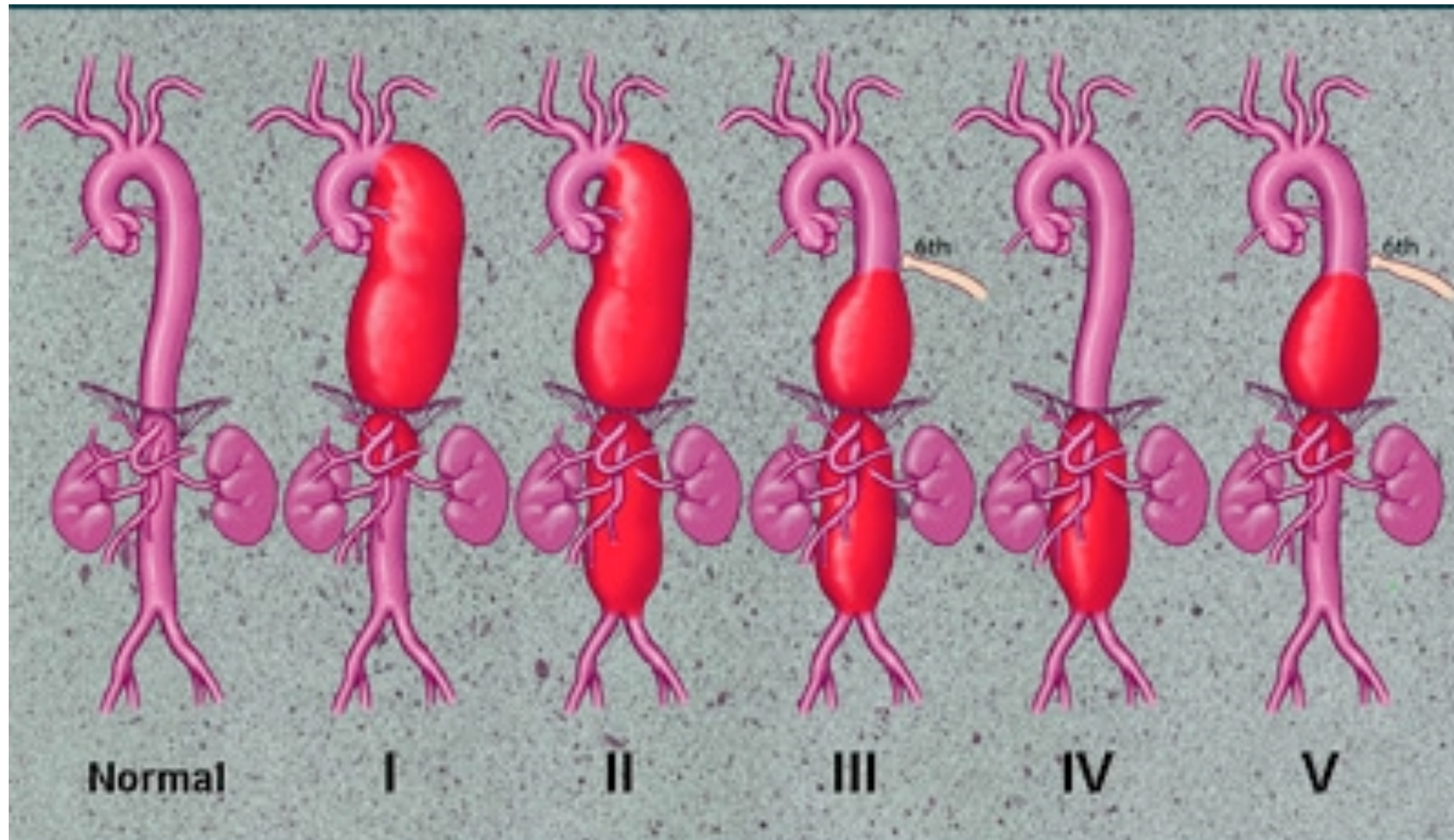
Aortic Aneurysms – Elective Surgery IRAAA



Aortic Aneurysms – EVAR



Aortic Aneurysms – TAAAs



TAAA Rupture: Treatment Options?

- A. Open repair
- B. Hybrid repair
- C. Fenestrated stent grafting
- D. All of the above

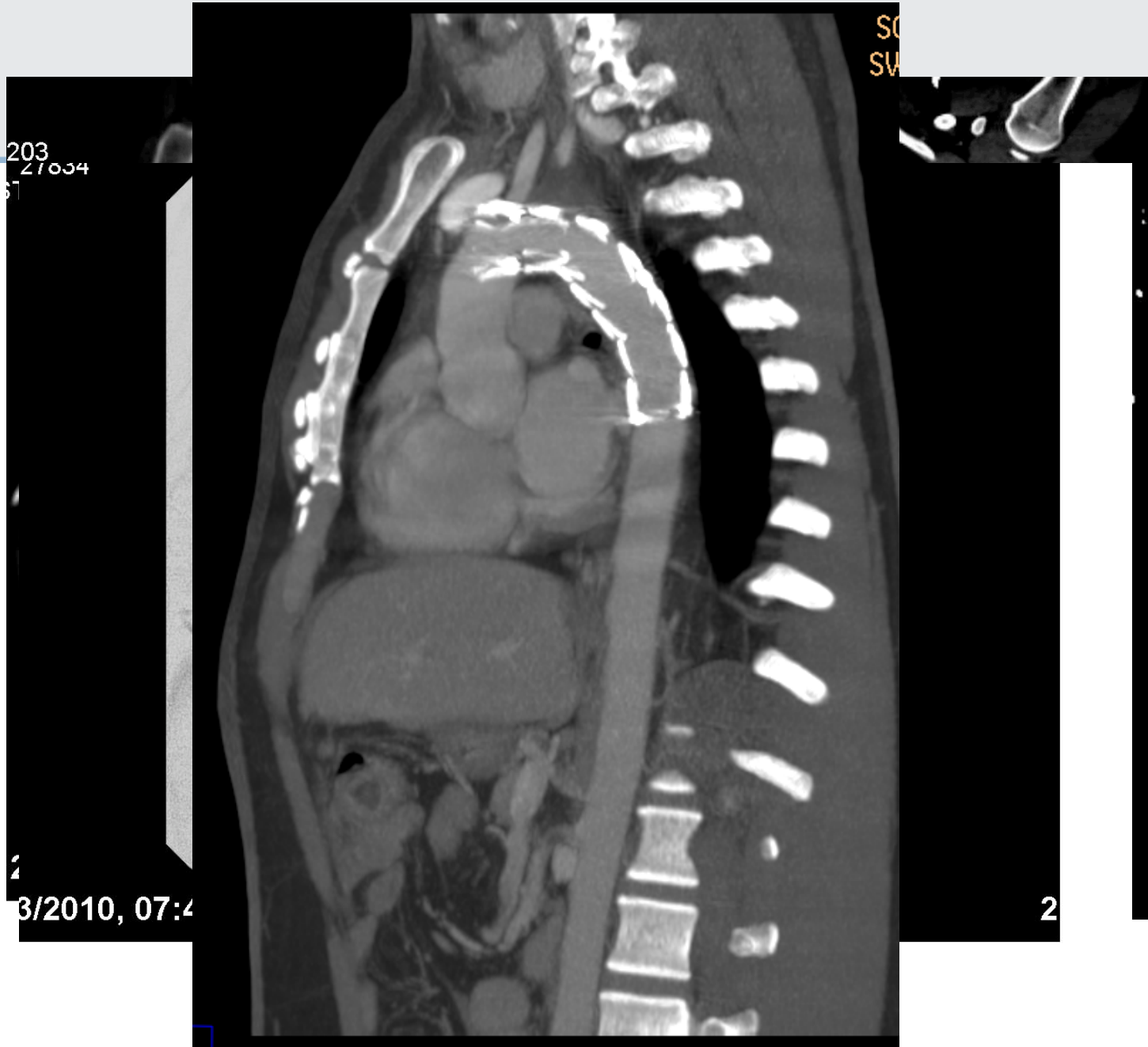
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- B. Produces a false aneurysm
- C. Is fatal in 80% of cases
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Which of the following confirms the diagnosis of transection of the descending thoracic aorta?

- A. Widened mediastinum
- B. Fractured first rib
- C. Left pleural effusion
- D. Positive CT aortogram
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QUESTIONS ?

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