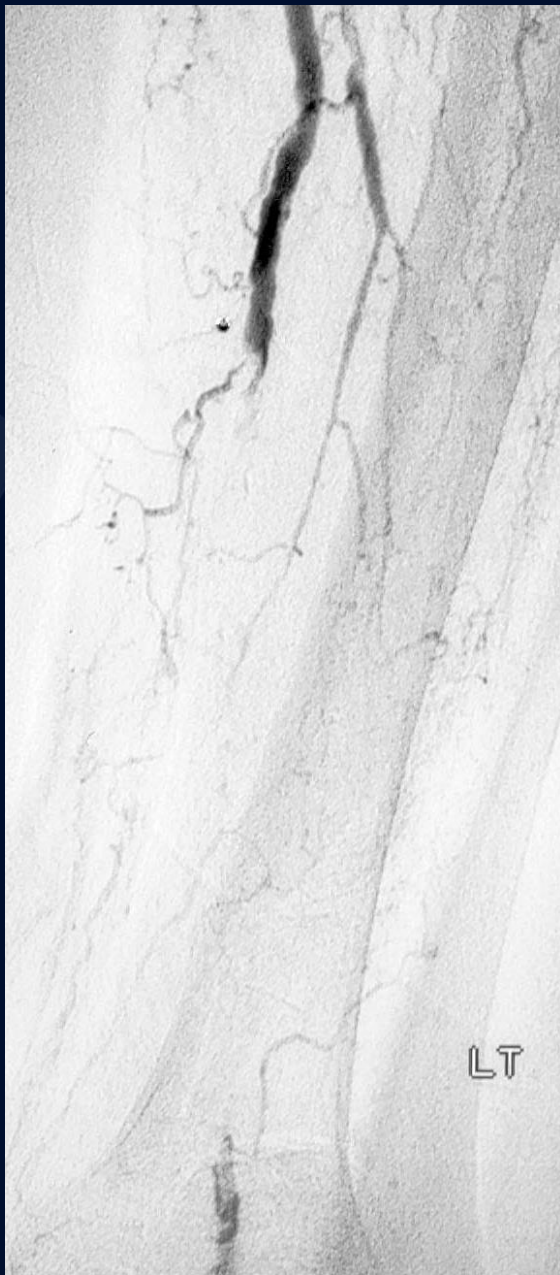


103-year-old female with history of
atrial fibrillation presenting with
acute leg pain, not on
anticoagulation

Jacob Kachura, MS4, MS

Racquel Helsing, MD

Conventional Arteriogram of Left Leg (Right Common Femoral Artery Approach)



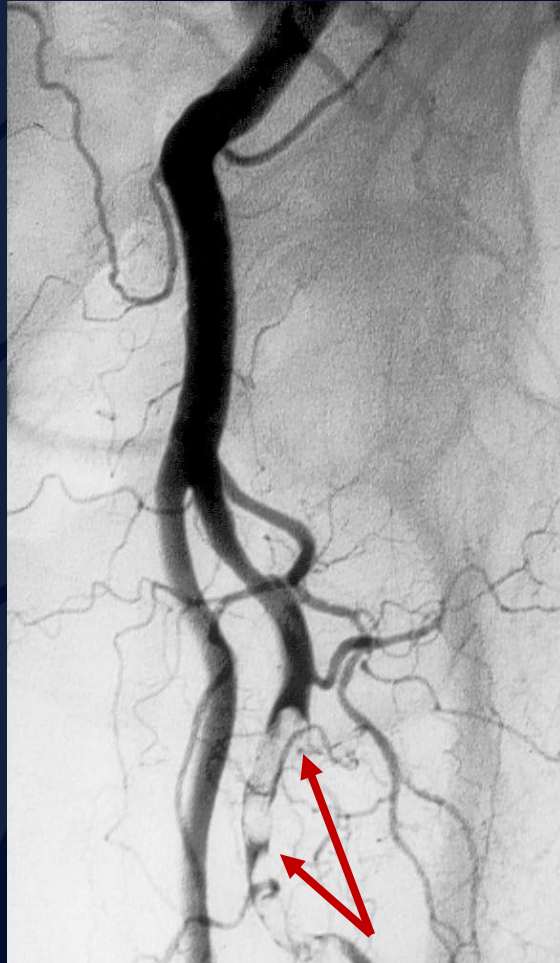
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching out, with a scalloped edge.

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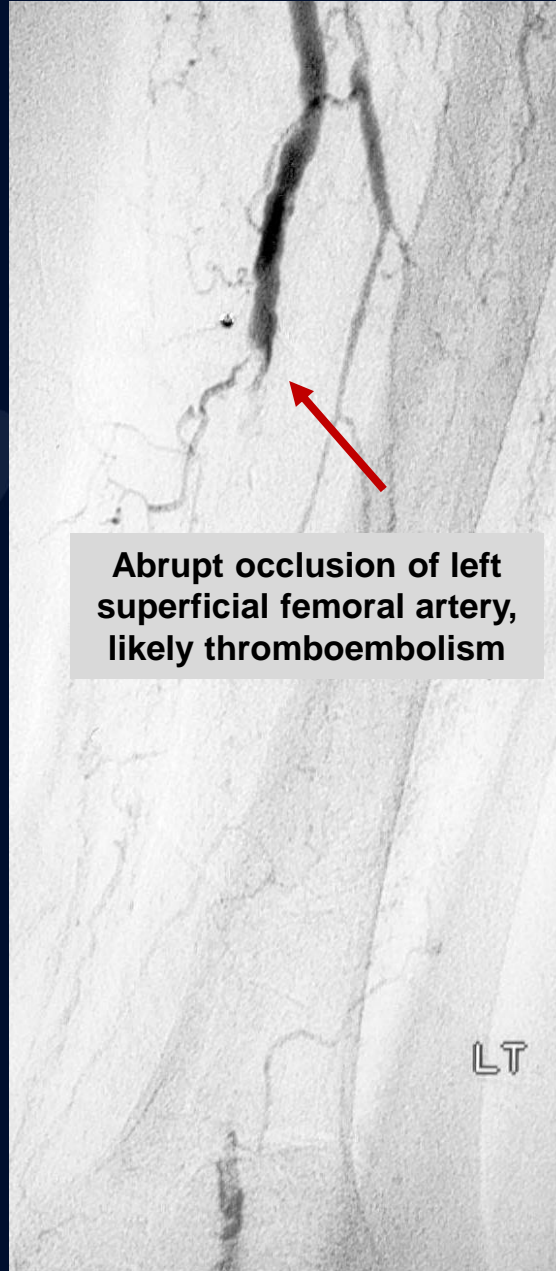
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide and partially overlapping the title text.

Acute Arterial Thromboembolism

Conventional Arteriogram of Left Leg (Right Common Femoral Artery Approach)



Abrupt occlusions in left profunda femoris artery with convex upper margins ("meniscus sign") due to multiple filling defects representing thromboemboli



Abrupt occlusion of left superficial femoral artery, likely thromboembolism



Stenoses due to atherosclerosis

Chronic atherosclerotic occlusion of left anterior tibial artery

Acute Arterial Thromboembolism

Etiology

- Cardiac sources (55-87%) e.g., atrial fibrillation, intra-atrial clot, clot formation in LV post cardiac infarction
- Aortic plaques and large aneurysms
- Paradoxical embolism
- Arterial injury

Clinical features

- Six Ps
 - Pain, pallor, poikilothermia, pulselessness, paresthesia, paralysis

Imaging Findings

CT angiography

- Used to determine amount and location of baseline embolic burden.
- Helpful for deciding whether to pursue open surgery or catheter-based intervention.

Arteriogram findings

- Intraluminal filling defect
- “Meniscus sign” – meniscoid or sidewall opacification at the occlusion site, suggesting an embolic mechanism
- “Tram-tracking” – tracking of contrast alongside the thrombus-filled vessel

Management

Management

- Initial management: systemic anticoagulation and IV fluids.
- Intra-arterial thrombolysis, open embolectomy, or percutaneous embolectomy.

This patient's pain resolved after Fogarty balloon embolectomy of the profunda, performed under local anesthesia via a small cut-down on the left common femoral artery.

References

<https://www.uptodate.com/contents/embolism-to-the-lower-extremities?csi=7374fe87-d9cb-4f21-b829-958e41ffe8e7&source=contentShare>

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