

Will Clot-Busting Therapies Revolutionize DVT Care?

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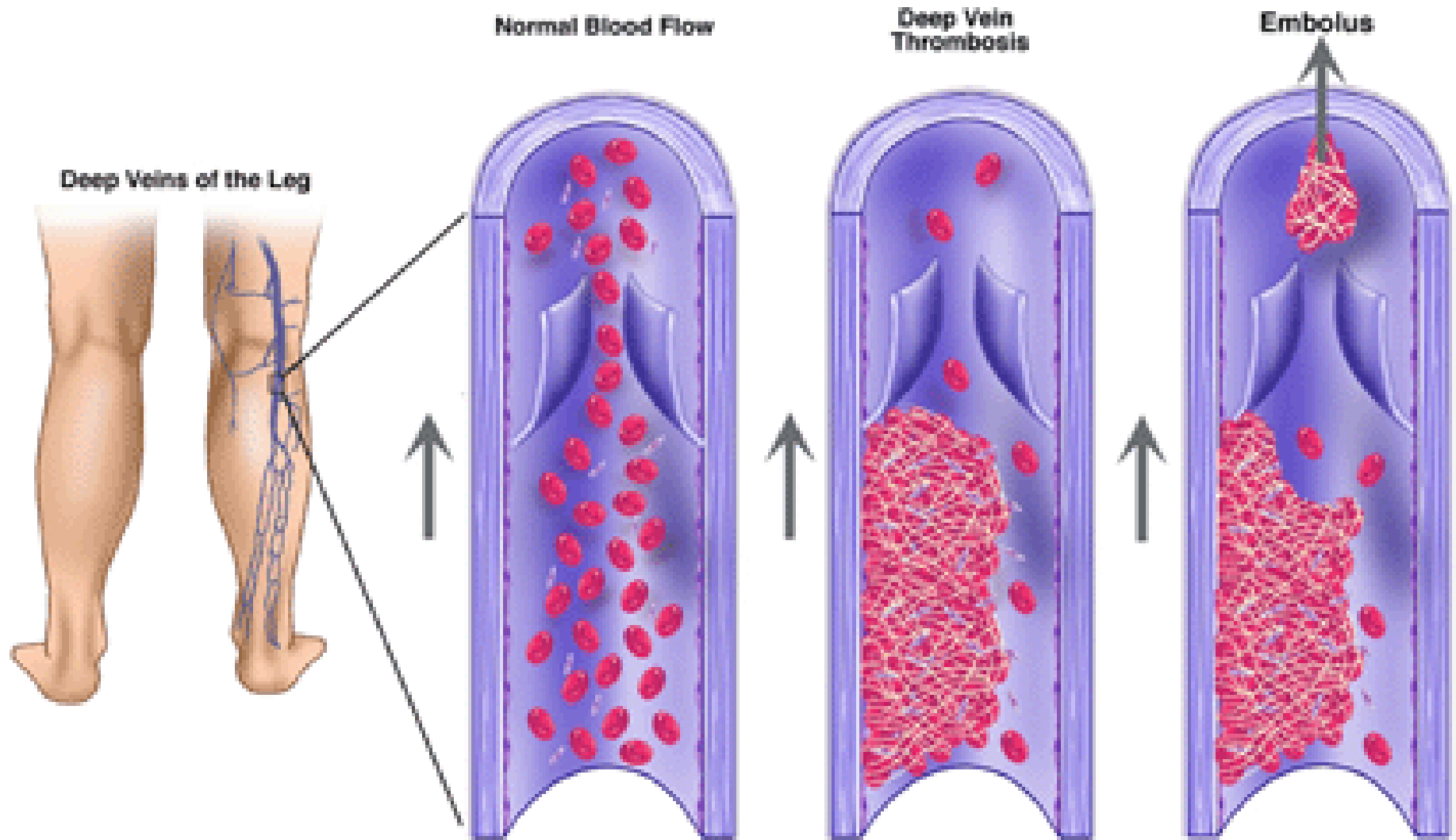
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Deep Vein Thrombosis (DVT)



What Most DVT Survivors Don't Know

EARLY Quality of Life



- ❖ DVT patients: severe leg pain & swelling - blood clot blocks vein
- ❖ Improves gradually over weeks to months
- ❖ In 1/3 patients, QOL does not recover (4 mo)
 - Kahn SR et al. *J Clin Epidemiol* 2006.

What Most DVT Survivors Don't Know

LATE Quality of Life



- ❖ Post-Thrombotic Syndrome (PTS) causes chronic leg pain, fatigue, swelling, skin changes, and ulcers
- ❖ PTS is common (**25-50% of patients**) lifelong, impairs QOL, and has no consistently effective treatments
- ❖ Venous ulcers often recur and are difficult and expensive to treat

What Most DVT Survivors Don't Know

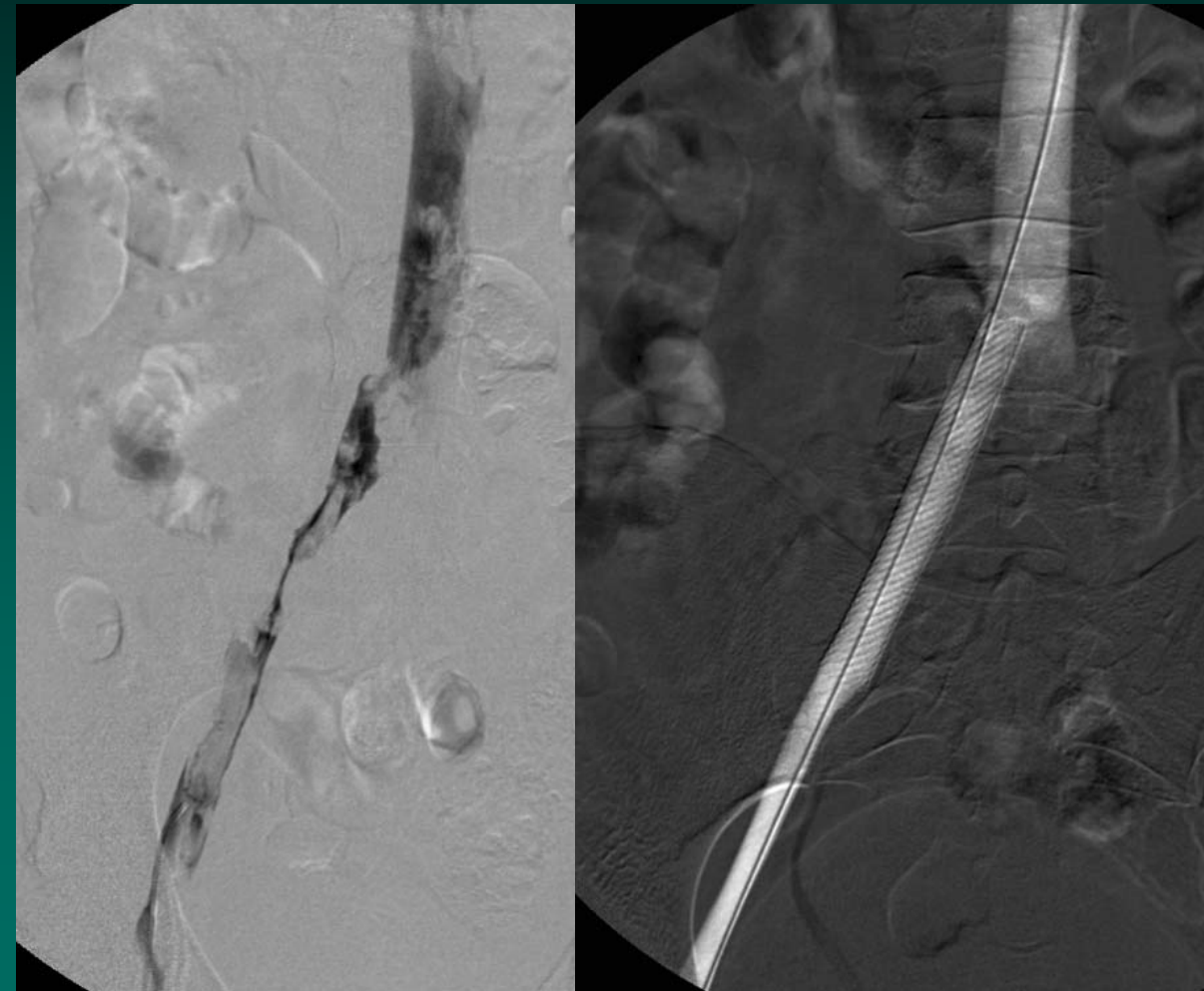
LATE Quality of Life



- ❖ Normal veins have one-way valves
- ❖ Despite use of blood-thinning drugs, blood clots permanently damage the valves (causing “**reflux**”) and block venous blood flow (“**obstruction**”)
- ❖ Markel A et al. J Vasc Surg 1992.
- ❖ Meissner MH et al. J Vasc Surg 1998.

THE OPEN VEIN HYPOTHESIS

“It’s the Clot, Stupid”



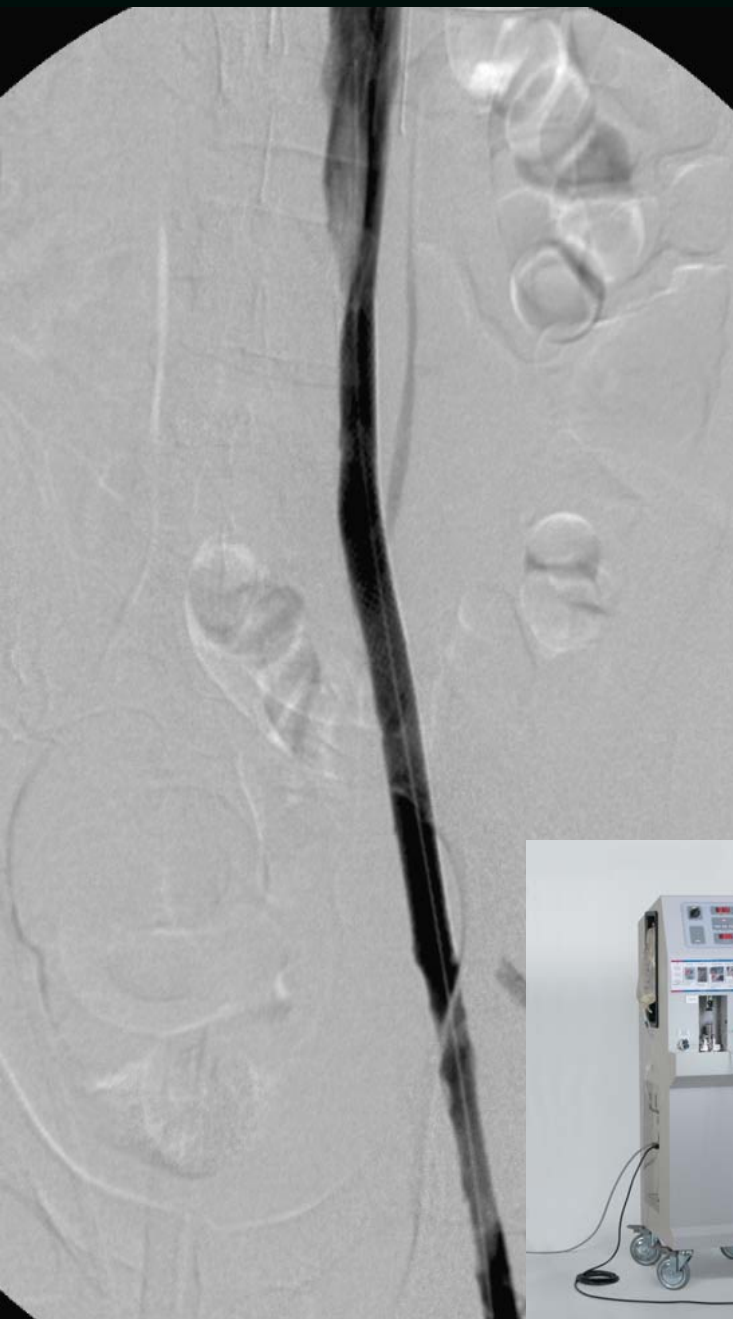
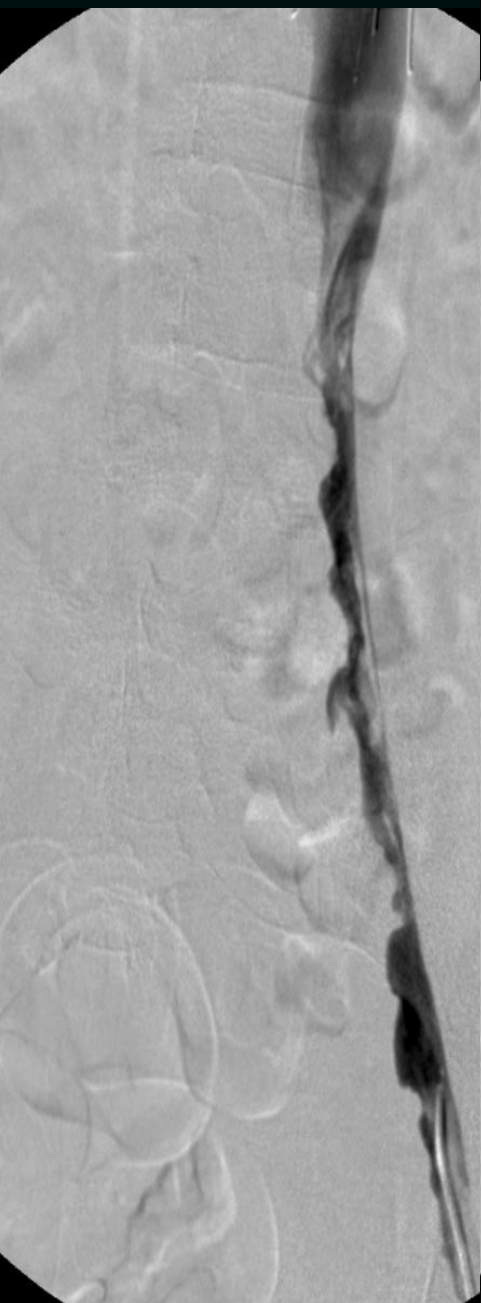
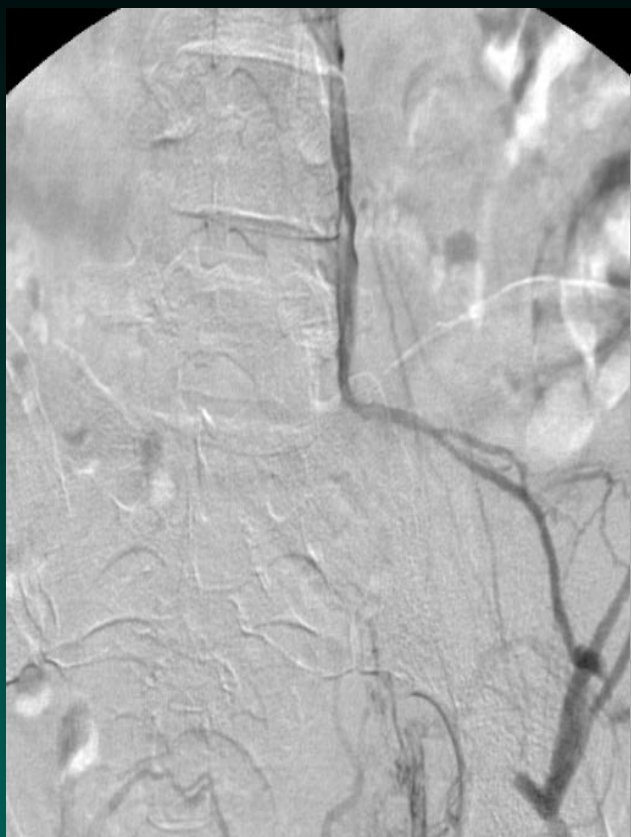
Can immediate clot removal speed relief of DVT symptoms, save venous valves, and prevent PTS?

Elliott 1979 – lysis with SK
Arnesen 1982 – lysis with SK
Plate 1984 & 1990 – surgery
Turpie 1990 – lysis with SK

What Many Doctors Don't Know

- ❖ SIR (2006): **Acute iliofemoral DVT** patients more likely to be symptom free with better QOL and an open, non-refluxing vein if they also receive CDT
 - Comerota AJ et al. J Vasc Surg 2000; 32:130-137.
 - AbuRahma AF et al. Ann Surg 2001; 233:752-760.
 - Elsharawy M et al. Eur J Vasc Surg 2002; 24:209-214.
- ❖ ACCP (2008): Suggest PCDT for patients with extensive proximal (i.e. **acute iliofemoral**) DVT
 - Kearon C et al. Chest 2008; 133 Suppl:454S-545S.



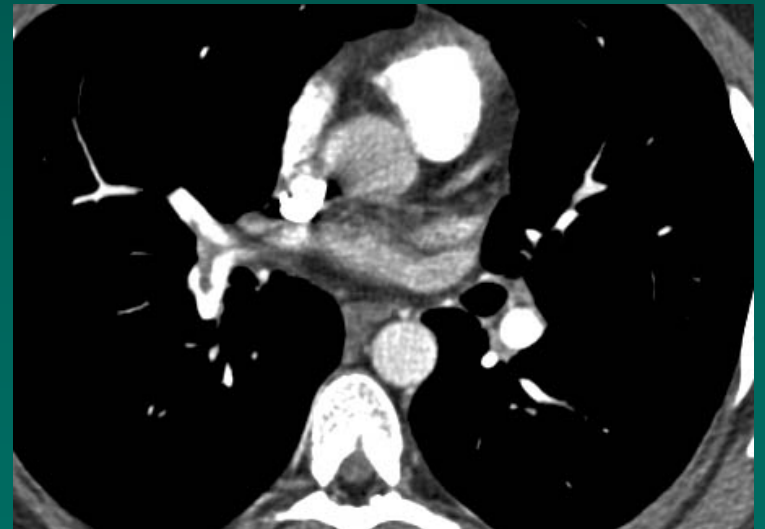
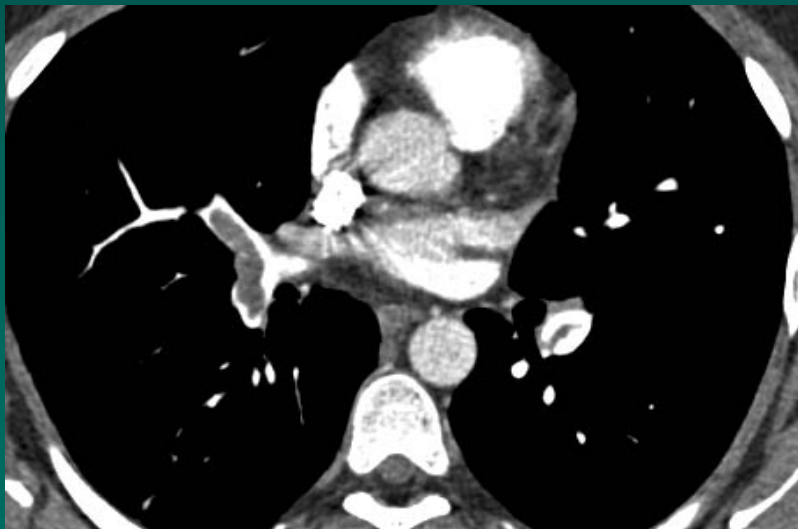
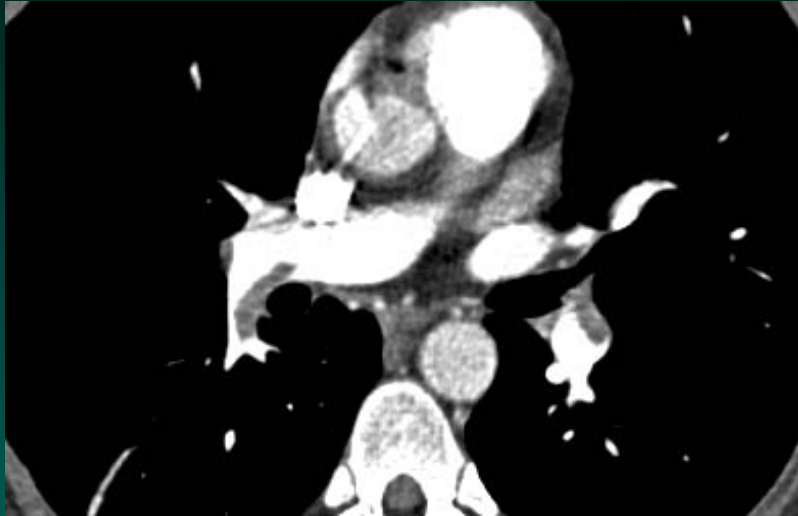


The ATTRACT Trial

- ❖ Acute Venous Thrombosis: Thrombus Removal with Adjunctive Catheter-Directed Thrombolysis
 - NHLBI-funded (\$10 million), Phase III, 28-Center RCT
 - 692 patients with **symptomatic, acute proximal DVT**
 - 1:1 randomization: PCDT + AC/ECS vs AC/ECS alone
 - Outcomes: PTS, QOL, symptom relief, safety, cost
 - Enrollment to begin 4th quarter 2008
 - Leaders: Vedantham (PI), Goldhaber (Study Chair)
 - Diverse physician network, SIR Foundation, AVF, ACP

What Many Doctors Don't Know

PCDT for Massive PE



Clot-Busting Treatment: A revolution? YES, Already!

- ❖ DVT research leaders, NIH, many physicians know that PTS prevention is IMPORTANT
- ❖ Fast, safe, convenient PCDT methods AVAILABLE
- ❖ 2008 practice guidelines concordant in favor of early PCDT for patients most likely to benefit: extensive proximal DVT or massive PE

Clot-Busting Treatment: A Revolution?

YES, if the ATTRACT Trial is positive

- ❖ Since 1960: DVT treatment aimed at preventing PE and recurrent DVT with blood-thinning drugs
- ❖ New DVT Treatment Paradigm guided by the Open Vein Hypothesis – use blood-thinners but **also remove the clot, open the vein, and prevent PTS!**

To REVOLUTIONIZE DVT Care Be ACTIVE, not Passive, about DVT!

- ❖ 2013 – WHAT PATIENTS & DOCTORS WILL DO
 - ❖ When at risk, ask about DVT/PE prevention
 - ❖ Receive hospital-mandated DVT/PE prophylaxis
 - ❖ Seek immediate care for symptoms of a “leg attack”
 - ❖ Routinely use compression therapy to prevent PTS
 - ❖ Routinely consider proven clot-busting therapies
 - ❖ EDUCATE – Support the Venous Disease Coalition!