

Deep Venous Thrombosis and Chronic Venous Disease

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National Blood Clot Alliance (877) 4 MY CLOT www.stoptheclot.org
Stop The Clot™

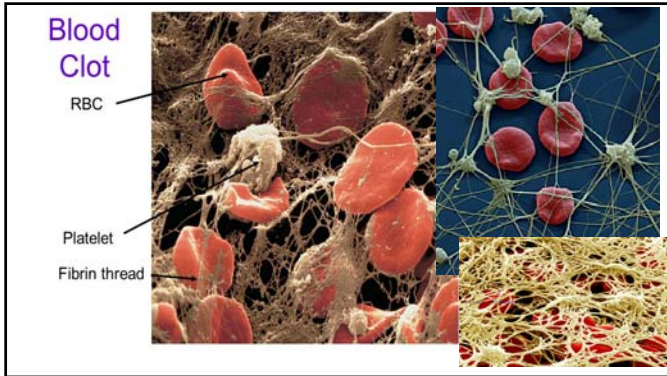
CLOTTING RISK: What You Need to Know

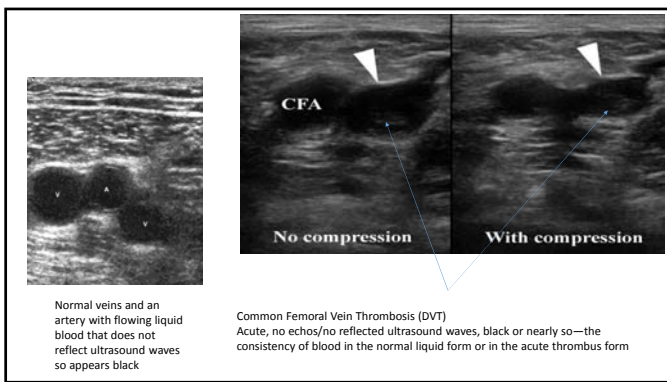
	Blood Clots Stop! Discuss with your doctor now.	<p>HIGH RISK</p> <ul style="list-style-type: none"> • Hospital stay • Major surgery, such as abdominal/pelvic surgery • Injury or leg replacement • Major trauma: auto accident or fall • Prolonged travel (flying) • Leg paralysis
	Blood Slows Caution! Talk with your doctor about risk.	<p>MODERATE RISK</p> <ul style="list-style-type: none"> • Older than age 60 • Trips over 4 hours by plane, car, train or bus • Active cancer/chemotherapy • Bone fracture or cast • Birth control pills, patch, or ring • Hormone replacement therapy • Pregnancy or recently given birth • Prior blood clot or family history of a clot • Heart failure • Bed rest over 3 days • Obesity • Genetic/familial or acquired blood clotting disorder
	Blood Flows Go! Stay alert to any change in risk.	<p>AVERAGE RISK</p> <ul style="list-style-type: none"> • Active • Younger than age 60 • No history of blood clots in immediate family • No conditions or diseases that increase clotting risk

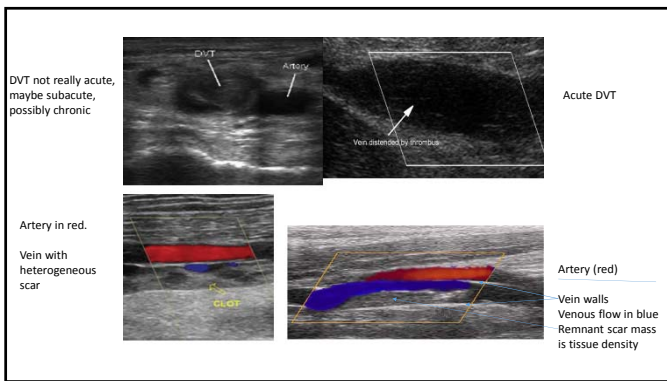
Chronic Skin Changes seen with Chronic Venous Insufficiency

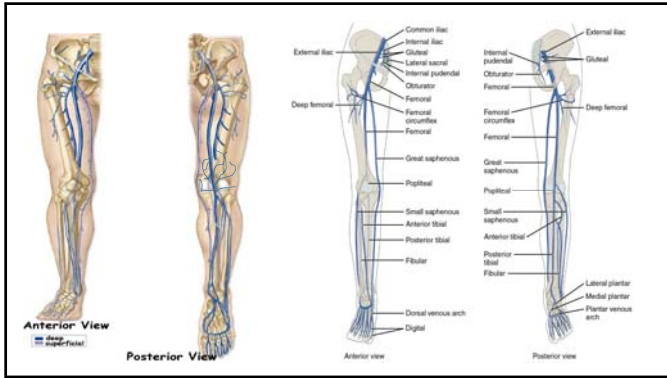
- Leathery, thick skin at ankle or leg due to irritation / scratching, but underlying skin is thin and fragile and can easily ulcerate
- Stasis dermatitis = Hyper-pigmentation from hemosiderin deposition creating a reddish-brown appearance with diffuse or spotty pigmentation
- Lipodermatosclerosis
- Pale or white lesions (atrophie blanche)
- Autoeczematous reaction

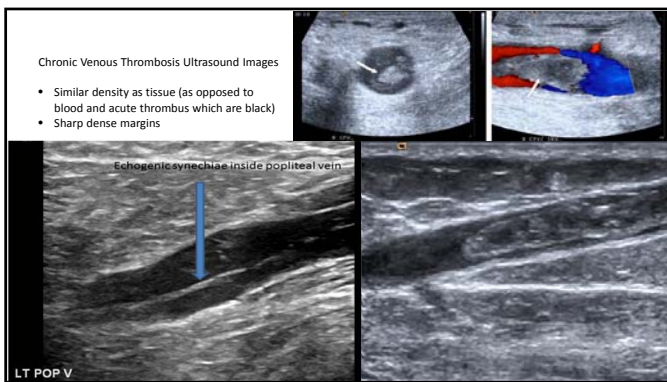










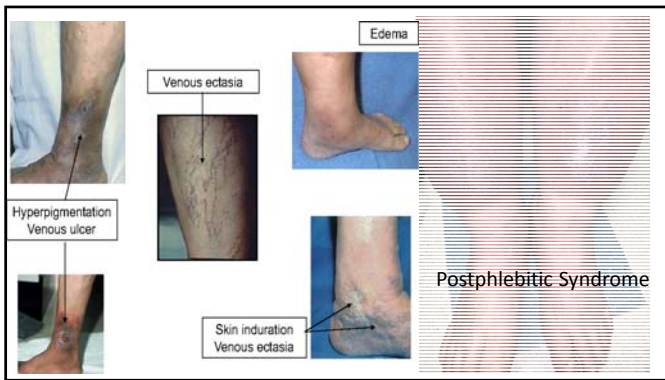


Deep Venous Thrombosis to Venous Insufficiency via Fibrosis

1. Deep Venous Thrombosis
2. Wall fibrosis
3. Valve dysfunction
4. Collaterals enlarge due to increased blood flow
5. a. Thrombus resolves with residual wall fibrosis, or
b. Thrombus leaves a scar, a fibrotic mass, a remnant mass
6. Hemodynamic Venous Insufficiency, due to fibrotic wall dysfunction, due to valve dysfunction, or due to an obstructing fibrotic remnant scar, the underlying pathology of the postphlebotic syndrome (PTS).

POST PHLEBITIC SYNDROME

- Changes that occur in the leg after a Deep Venous Thrombosis
- Subjective symptoms of heaviness, aching, and paresthesia
- Objective changes of swelling, dermatitis of an erythematous finely scaling rash, rust color skin staining, intradermal blisters, leathery skin
- Occurs to some degree in 30-50% of leg DVT
- Venous Hypertension as a result of vein damage and scarring from the DVT
- Decreases the quality of life





Villalta Score of the Post-Thrombotic Syndrome (PTS)

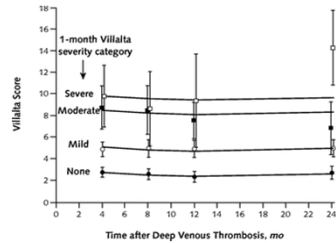
Symptoms	Clinical signs
Pain	Edema
Cramps	Skin induration
Heaviness	Hyperpigmentation
Pruritus	Redness
Paraesthesia	Pain during calf compression
	Venous ectasia
Each symptom/sign rated as 0 (absent), 1 (mild), 2 (moderate), or 3 (severe)	
Scoring	
0 to 4	No PTS
5 to 14	Mild/moderate PTS
>15 or presence of ulcers	Severe PTS

Villalta Score Variables:

- Pain
- Cramps
- Heaviness
- Pruritus
- Paresthesia
- Edema
- Redness
- Induration of skin
- Hyperpigmentation
- Varicose Veins
- Pain with compression hose

Higher Scores somewhat correlated with:

- Iliac vein/CFV DVT
- Age
- Weight

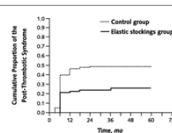


Ann Intern Med. 2008; 149(10): 698-707

Annals of Internal Medicine

From: Below-Knee Elastic Compression Stockings To Prevent the Post-Thrombotic Syndrome A Randomized, Controlled Trial

Ann Intern Med. 2004;141(3):249-256. doi:10.7326/0000-8851-141-3-200403170-00004

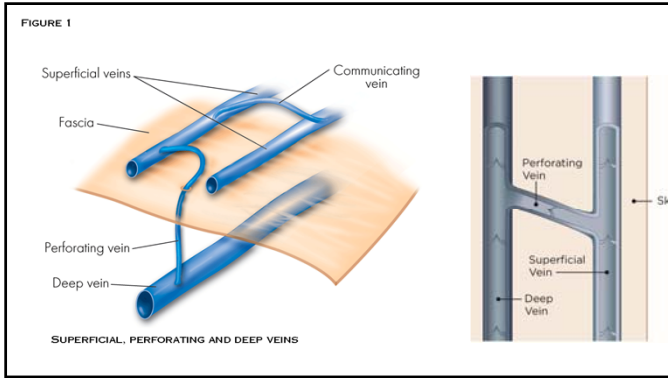


Patients at risk, n
 Control group 90 54 47 43 41 40 40 33 26 20 16
 Elastic stockings group 90 71 69 66 64 62 59 48 31 24

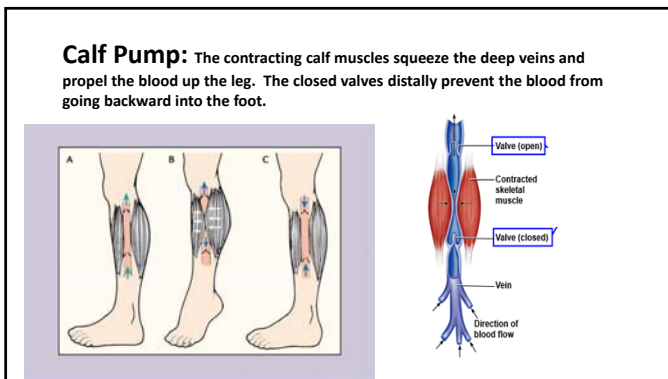
Figure Legend:
 Cumulative incidence of the post-thrombotic syndrome in patients wearing elastic stockings and those in the control group.

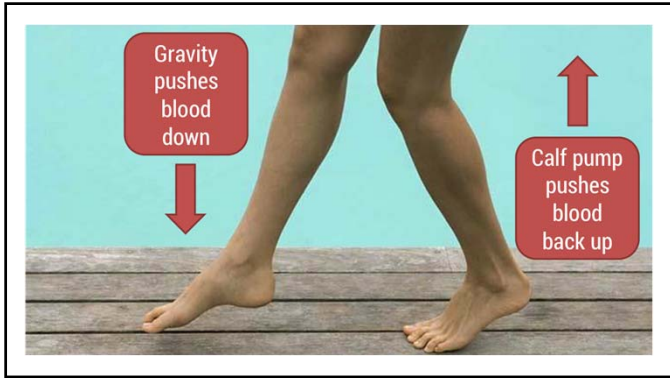
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American College of Physicians











Patient presents to the ER with acute leg symptoms of acutely decompensated PTS. The remnant scar of a remote DVT is identified as a DVT. Patient is treated with anticoagulants. Fortunately, ancillary DVT treatment is compression and elevation, so the PTS will improve.

Post Phlebotic Syndrome

- Late effect of DVT
- Vein valves become incompetent
- Varicose veins
- Swelling
- Dermatitis
- Hemosiderin hyperpigmentation
- Leathery skin
- Heavy aching symptoms



Chronic DVT and Chronic Venous Insufficiency

TREATMENT

1. Compression, resolution of edema
2. Skin Care
3. Exercise, calf
4. Treatment of superficial venous insufficiency



Prevention of future problems:

1. Compression
2. Skin Care
3. Calf Exercise
4. Treatment of superficial venous insufficiency
5. Documentation of "Chronic DVT" or "post-thrombotic scar remnants" to avoid a false acute DVT diagnosis.
