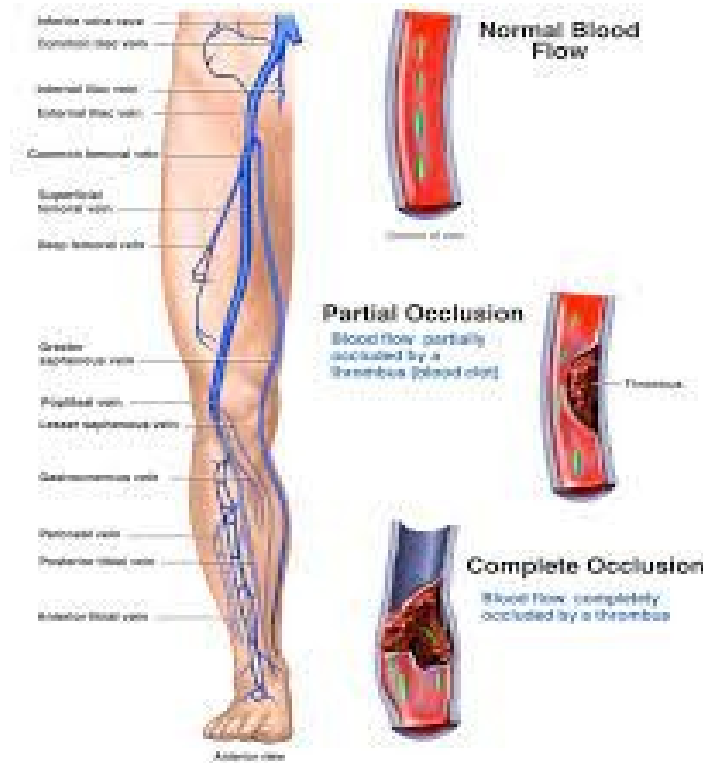


DEEP VEIN THROMBOSIS



Presented by:
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INTRODUCTION

- DVT occurs when a blood clot (**thrombus**) forms in one or more of the deep veins in the body, usually in the legs.
- Venous thrombosis- clot formation in veins.
- Main site of thrombus formation occurs femoral vein, popliteal vein, paroneal vein, posterior tibial veins.
- Mostly 67% of Venous thrombosis occurs in paroneal vein / calf veins.
- Most of the DVT occurs in left leg becoz left common iliac vein compressed by left iliac artery.

aggregated [platelets](#) and [red blood cells](#) that form a plug, and a mesh of cross-linked [fibrin](#) protein.

Thrombus

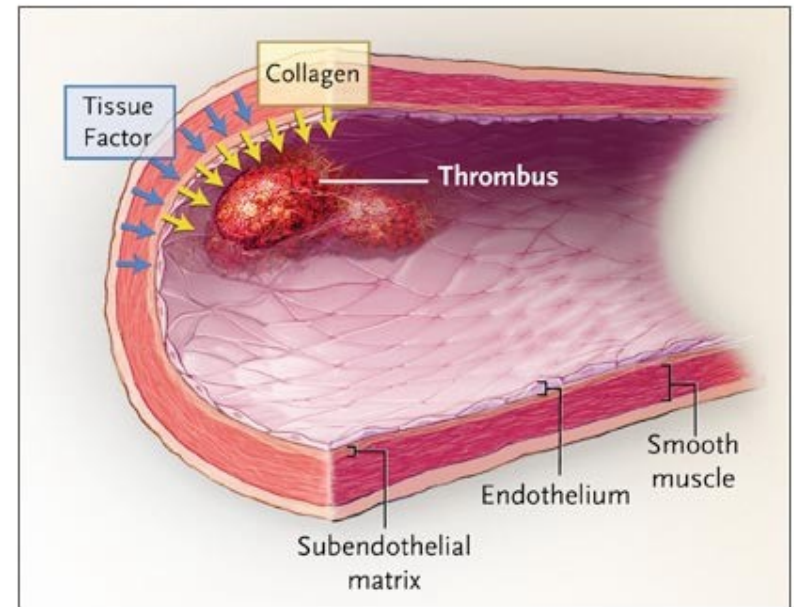
Microclots

obstruct the flow of blood in the capillaries.

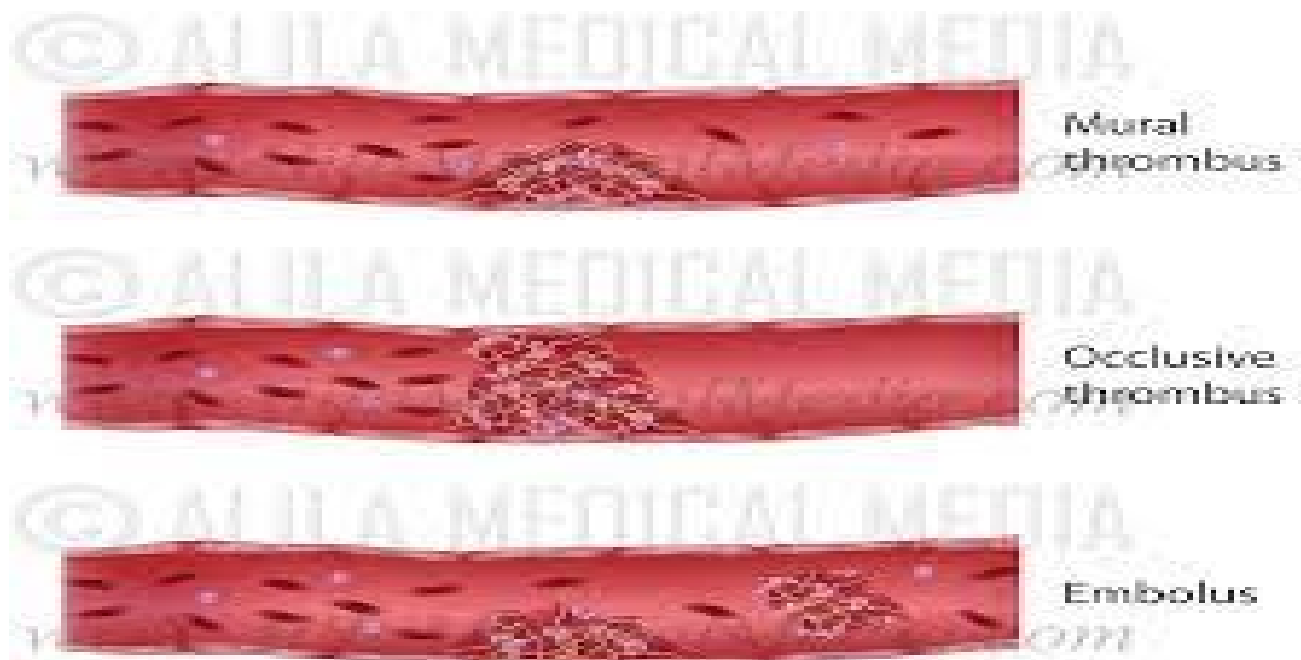
→ **Mural thrombi** are thrombi that adhere to the wall of a large [blood vessel](#) or [heart chamber](#).

occlusive thrombus

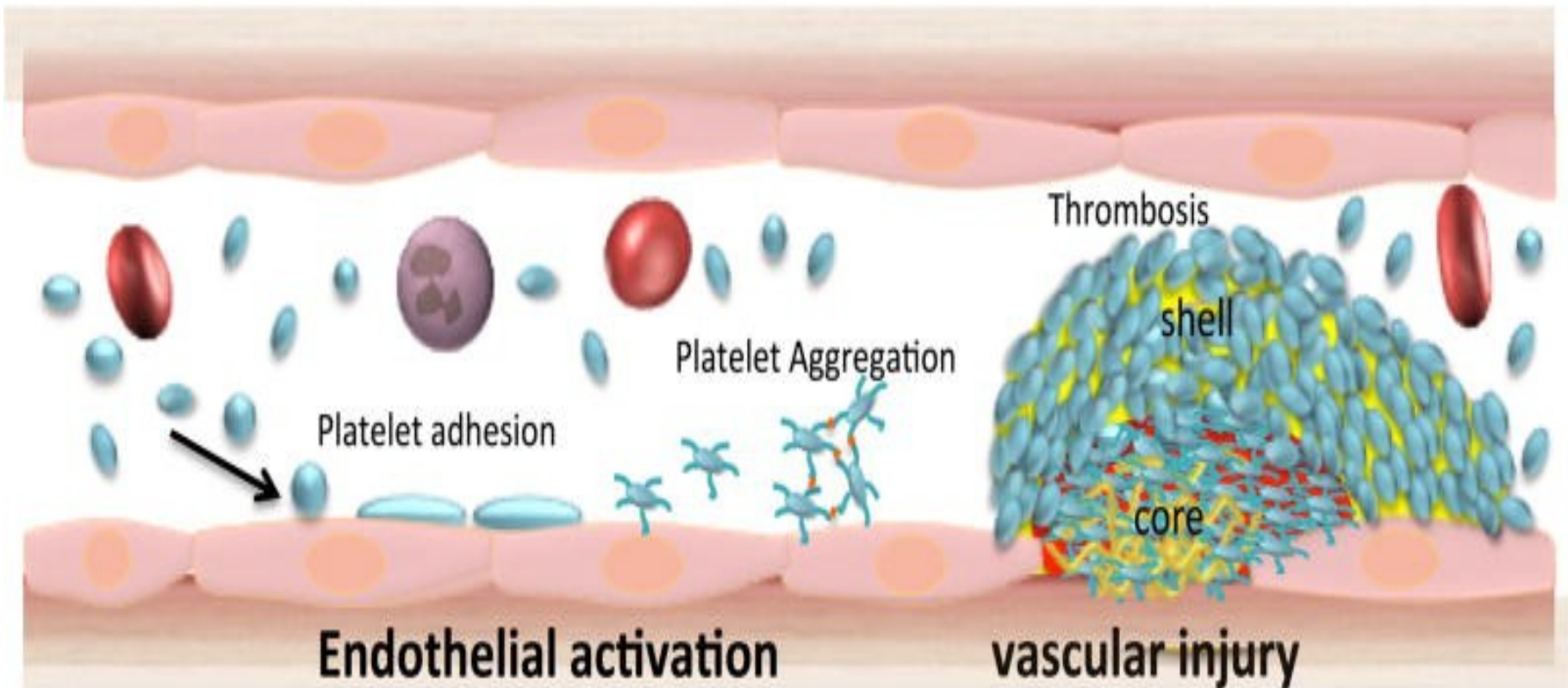
blood flow may be completely cut off in small blood vessels.



Thrombus dislodges → embolus → block blood flow → embolism



Platelet role in hemostasis and thrombosis



Resting Platelet



Fibrinogen



RBC



Thrombus core



Activated Platelet



Fibrin



Leukocyte

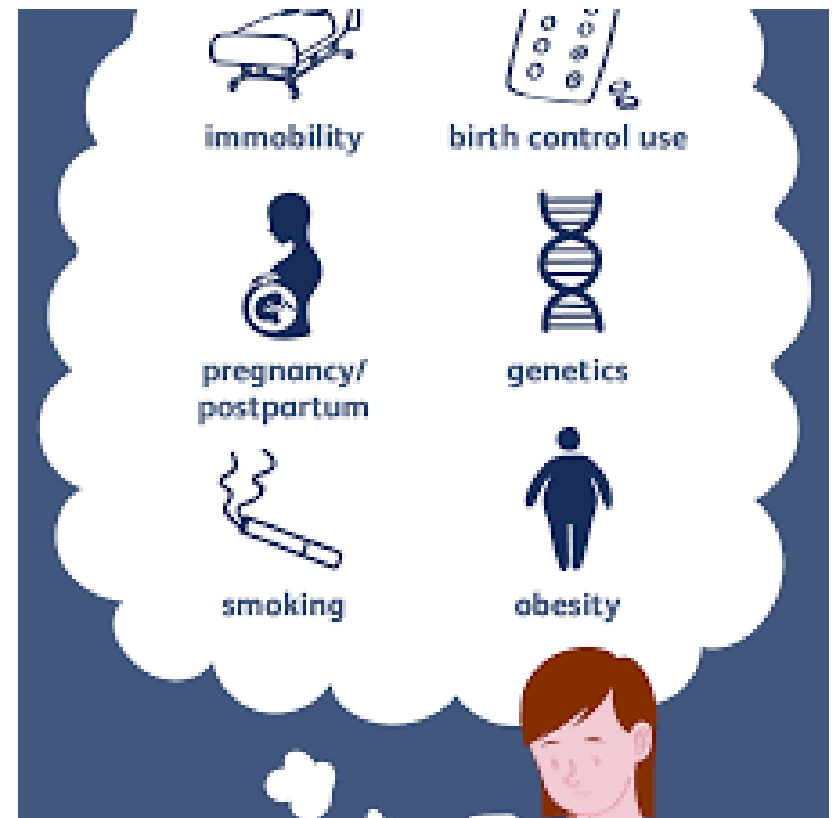


Thrombus shell

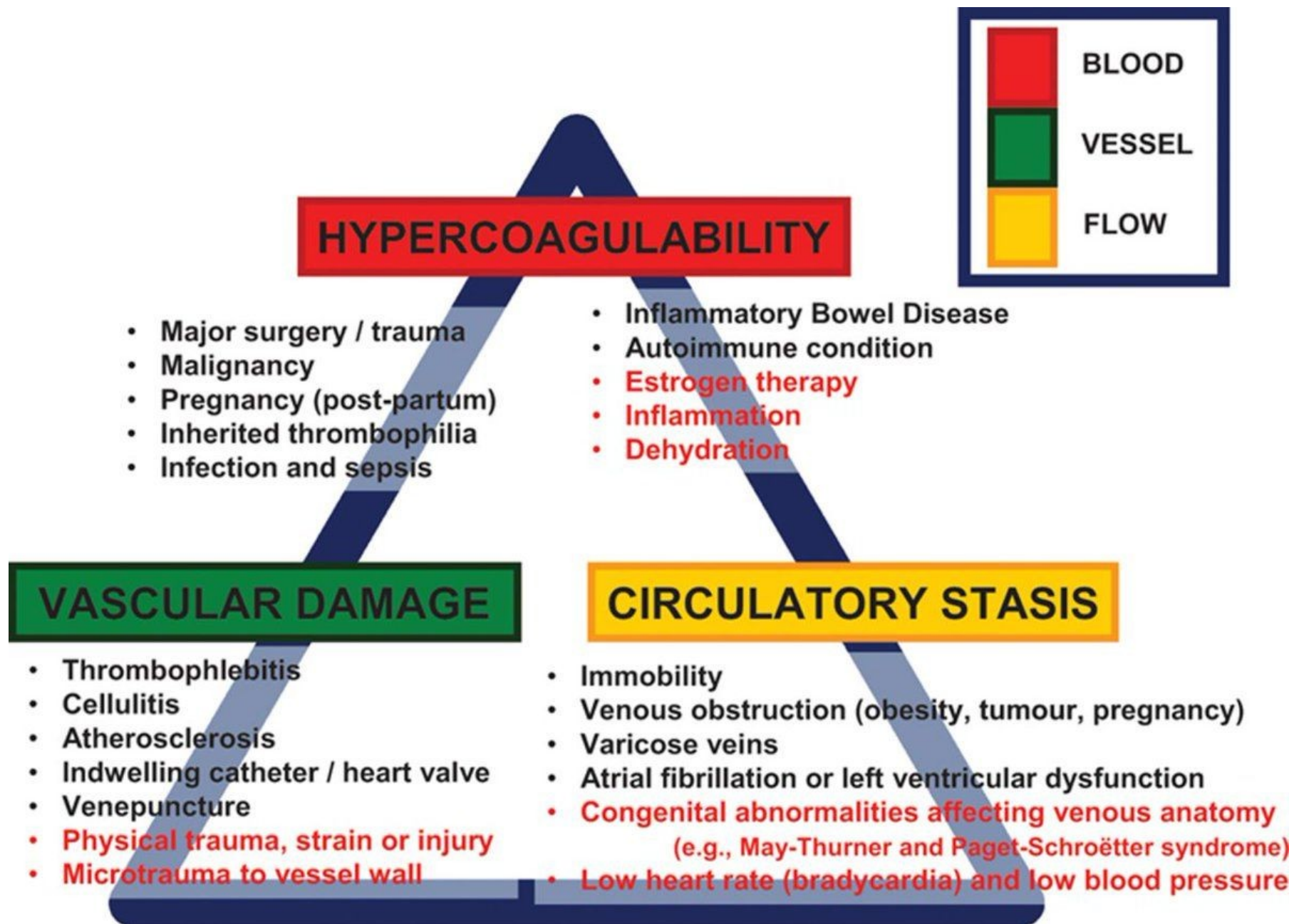


CAUSES

- Virchow's triad: Venous stenosis, Hypercoagulability, Endothelial damage.



- Prolonged bed rest, spinal injury, surgery, trauma, central venous catheter.
- Occupational causes.
- Polycythemia vera, pregnancy.



Due to listed etiological factors



Reduced blood flow result in venous blood stasis



Formation of blood clot result in inflammation of veins



Endothelial lining damage causes clotting of blood



Cause thrombophlebitis



DVT

SIGN AND SYMPTOMS

- Odema, erythemia, warmth, tenderness, red purple colour.
- Homan sign
- Moses sign
- DVT may associate with pulmonary embolism swelling in leg and leg pain, cyanosis.
- Sudden dyspnea, chest pain, rapid pulse-warning signs.



INVESTIGATION

- PT/INR
- Venography
- D-Dimer test
- CT angiography
- Doppler ultra sound
- MRI

TREATMENT

- Anti coagulant-
 - ✓ Heparin (lovenox) monitor by aPTT time.
 - ✓ Warfarin (Coumadin) – PT-INR test.
- Thrombolytic streptokinase urokinase.
- Compression stockings
 1. Granulation stocking
 2. pneumatic stockings.

