

SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES



Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai
Approved by Pharmacy Council of India, New Delhi.
Coimbatore -641035

COURSE NAME: HUMAN ANATOMY AND PHYSIOLOGY (ER20-14T)

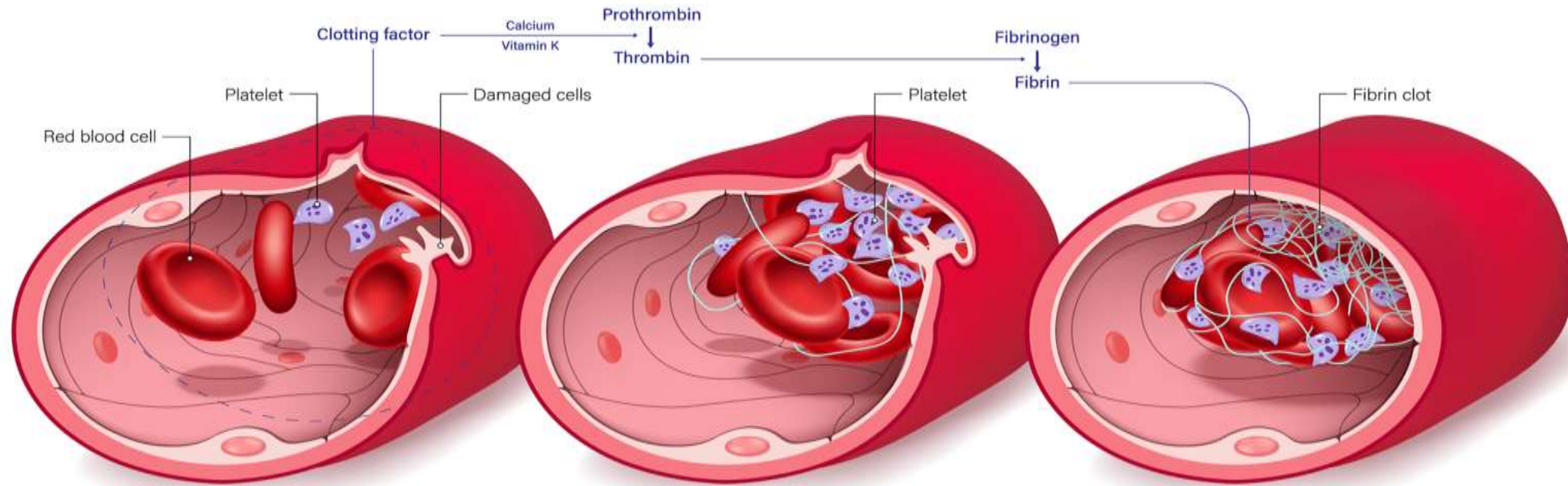
I D. PHARM

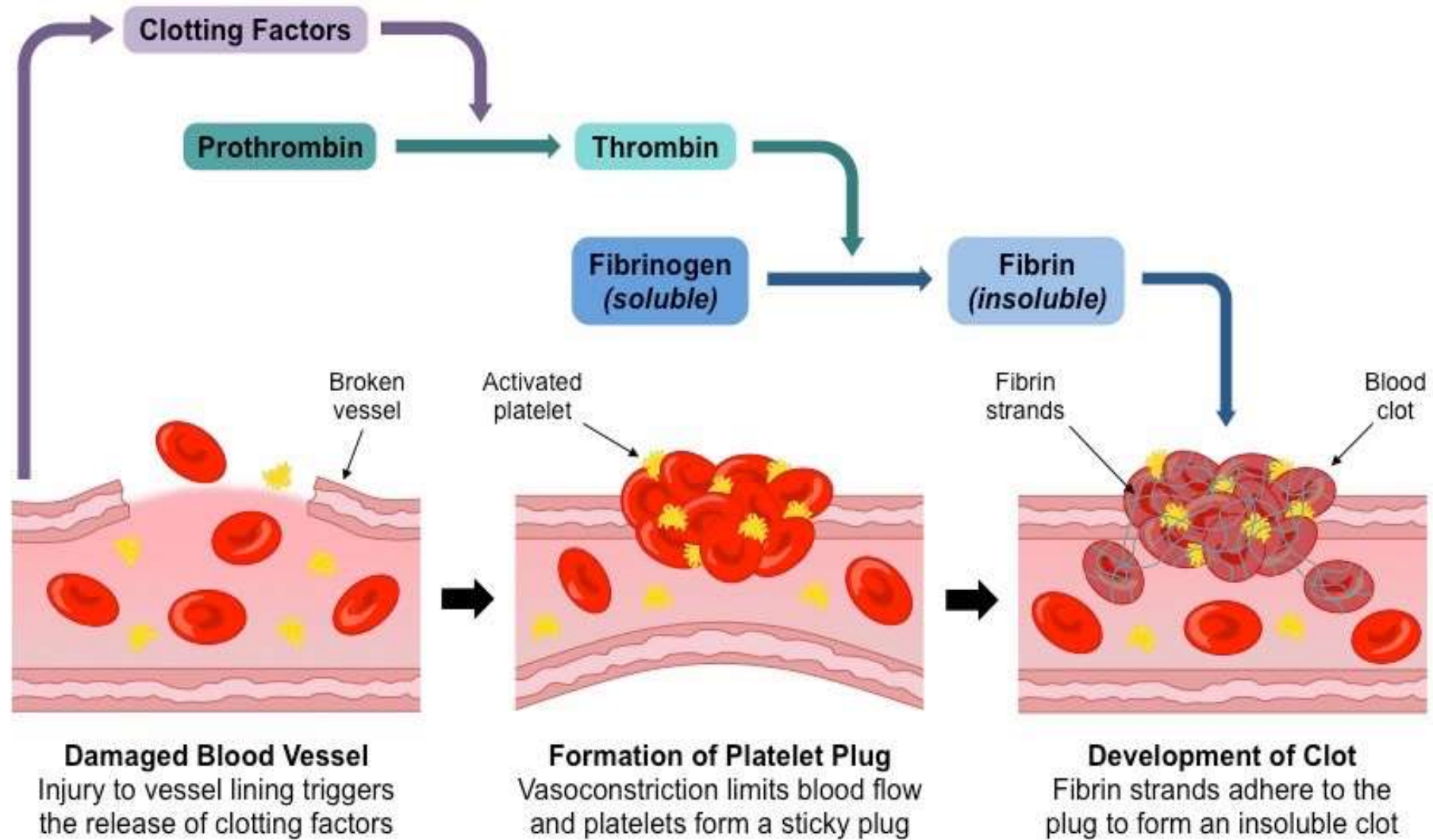
TOPIC : BLOOD CLOTTING

MINDMAP

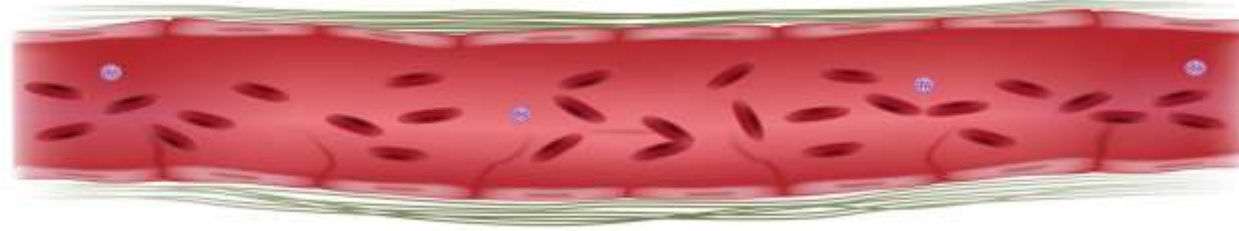


Blood Clotting



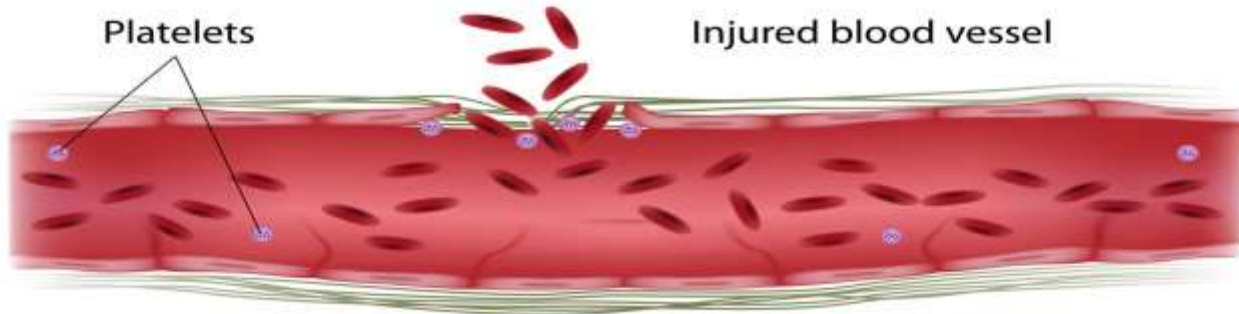


Normal blood vessel



Platelets

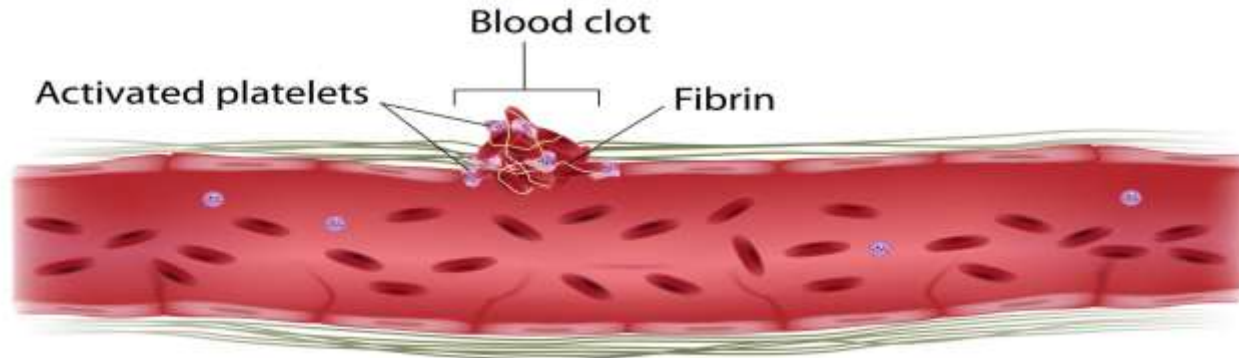
Injured blood vessel



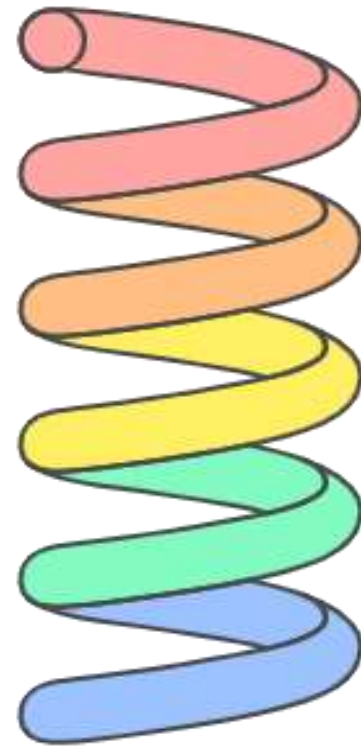
Blood clot

Activated platelets

Fibrin



Hemostasis Process



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Vascular Spasm



Platelet Plug Formation



Blood Coagulation

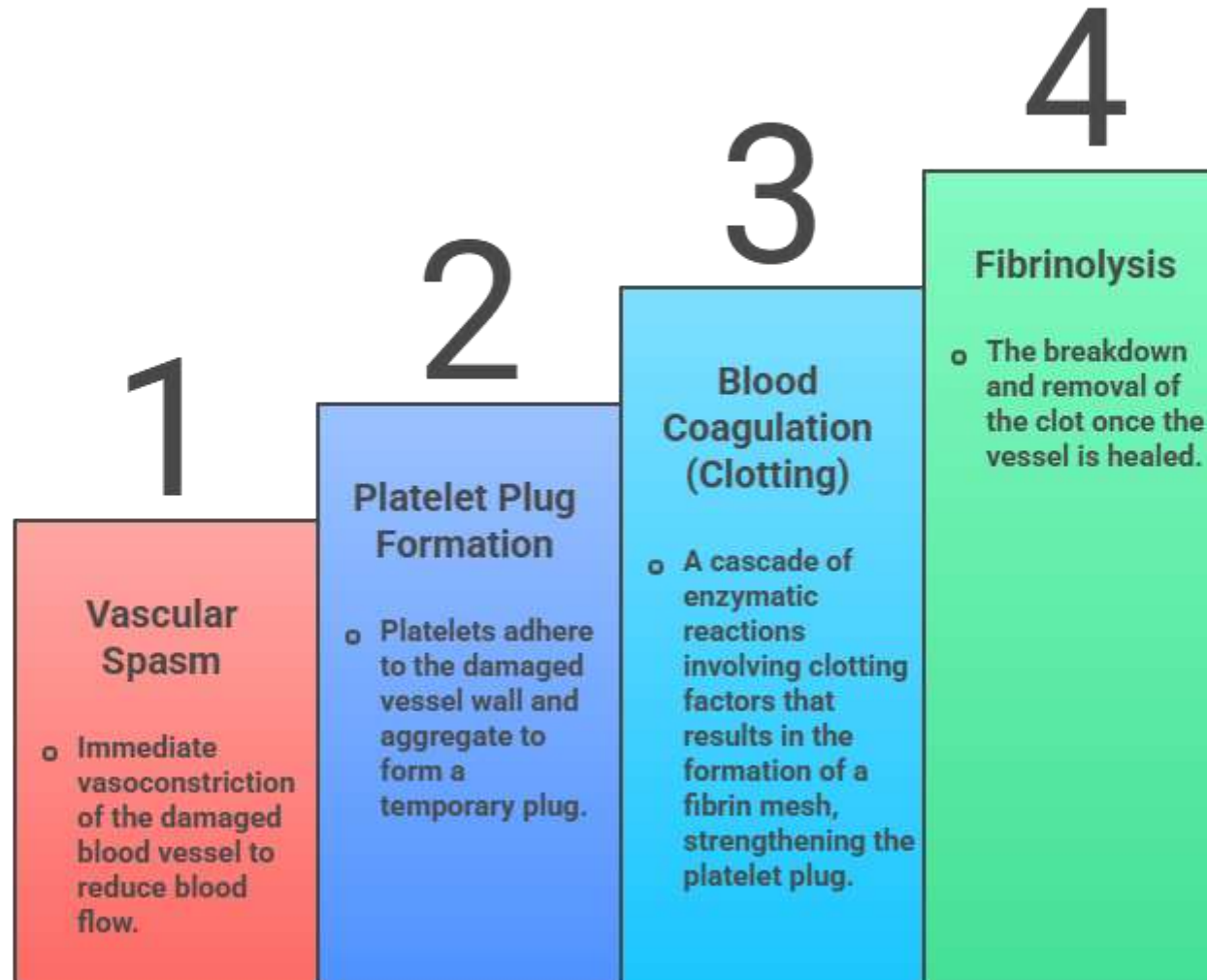


Clot Stabilization

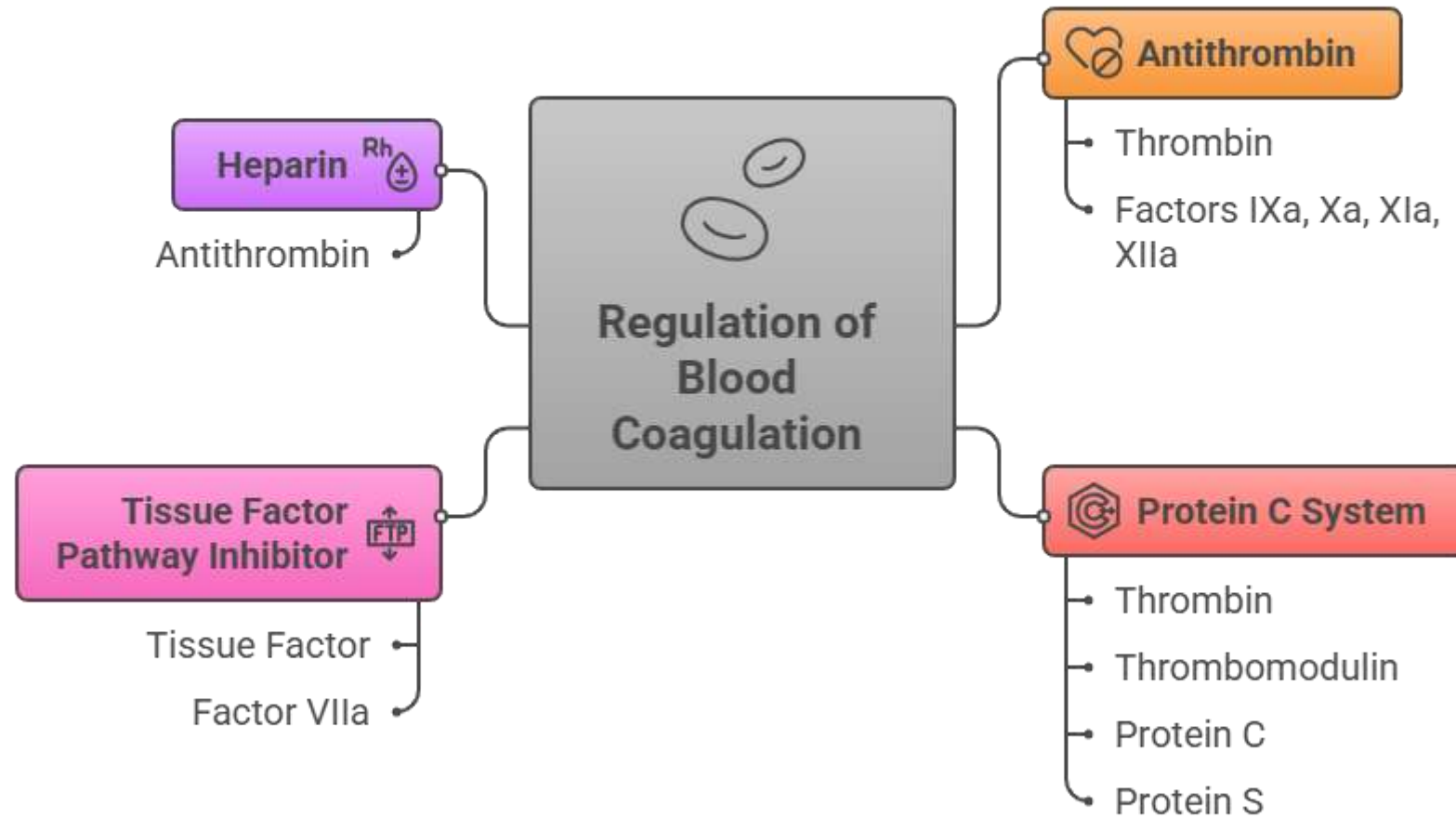


Tissue Repair

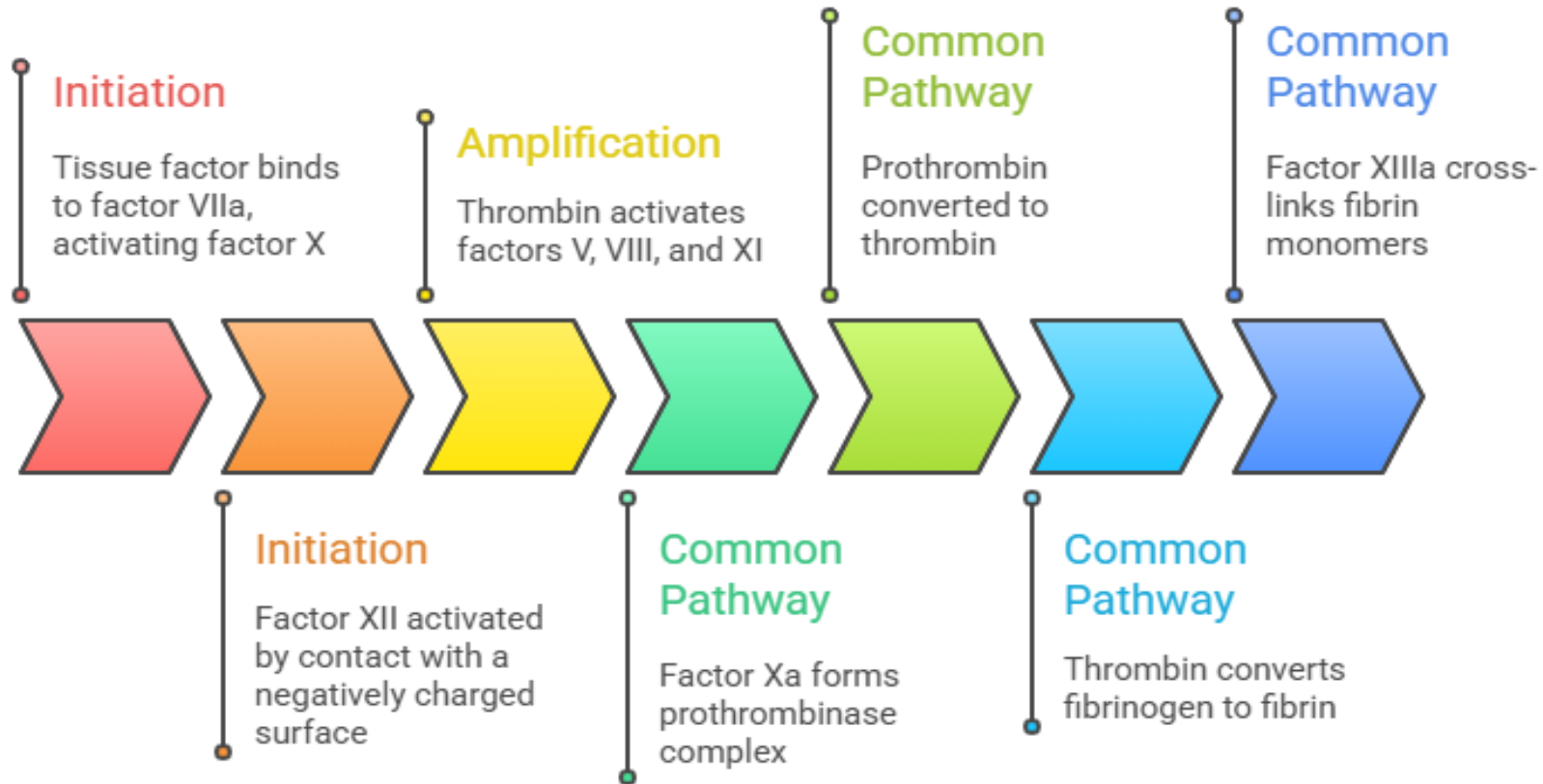
Hemostasis Process



Regulation of Blood Coagulation

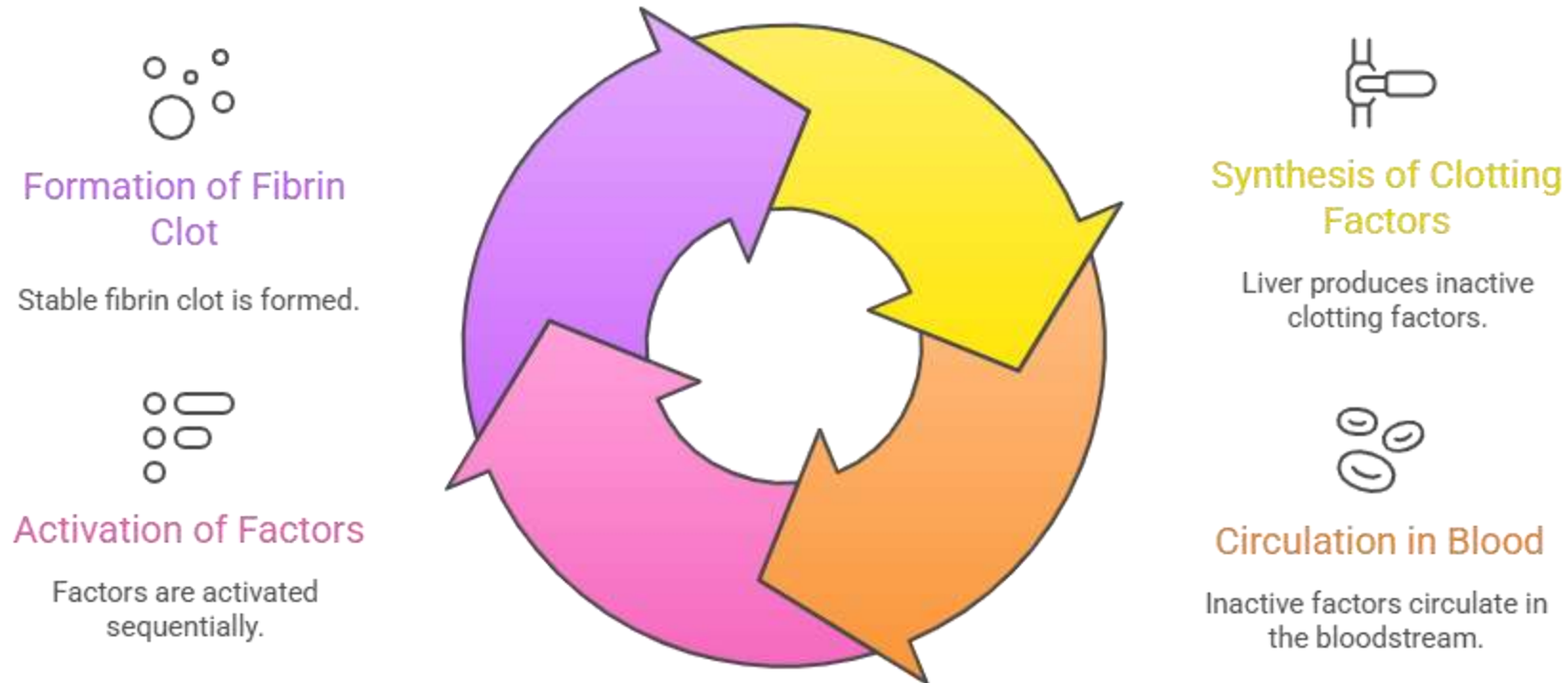


The Blood Clotting Cascade: A Step-by-Step Journey



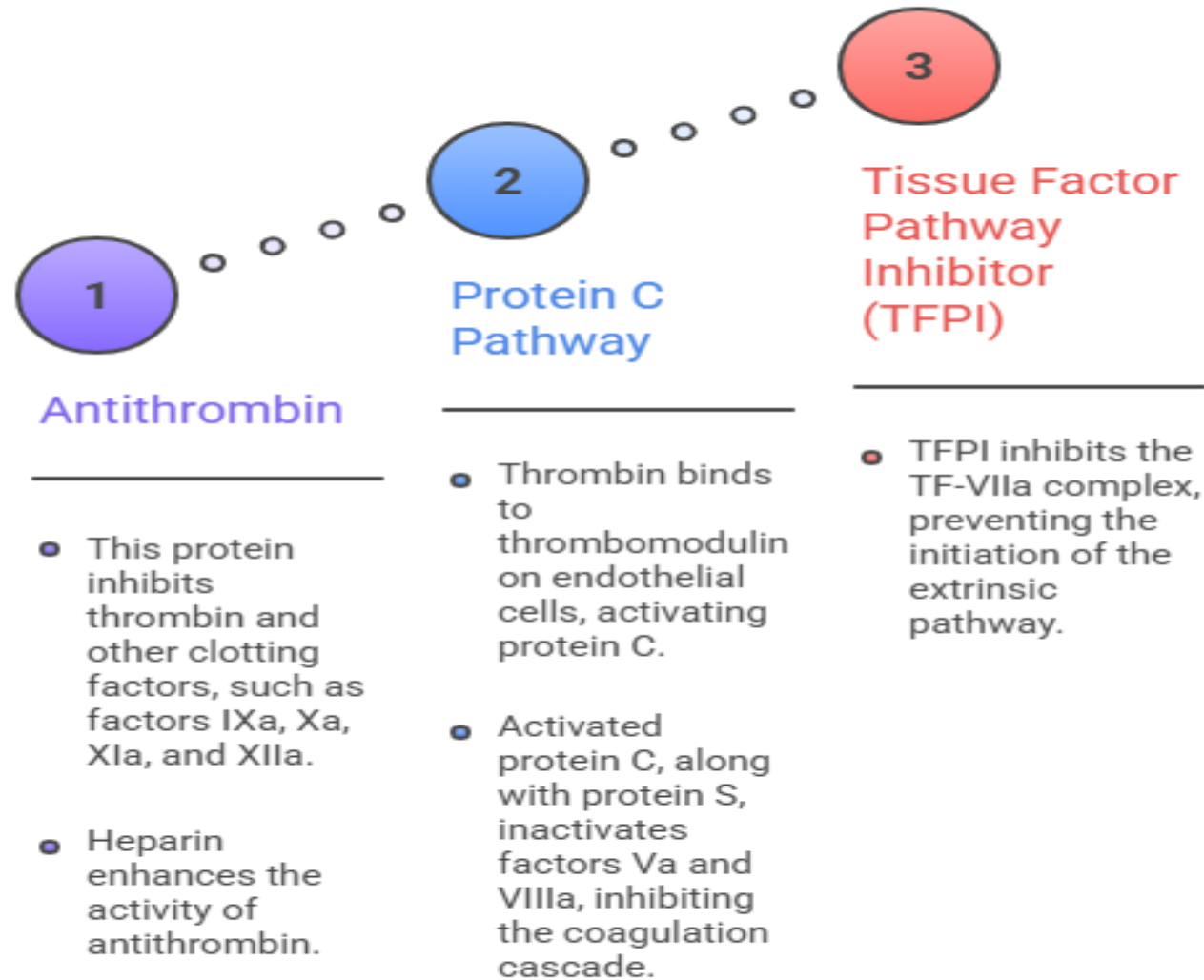
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Blood Coagulation Cycle

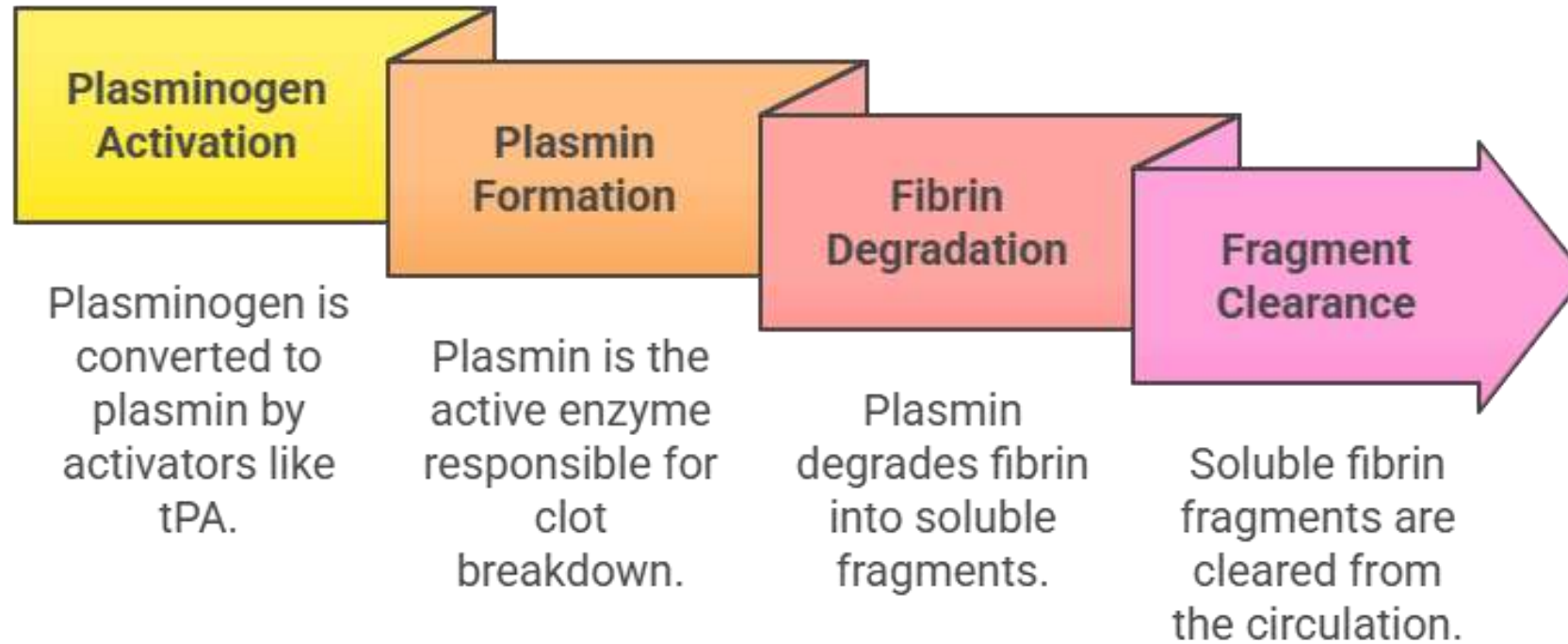


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Coagulation Inhibitors

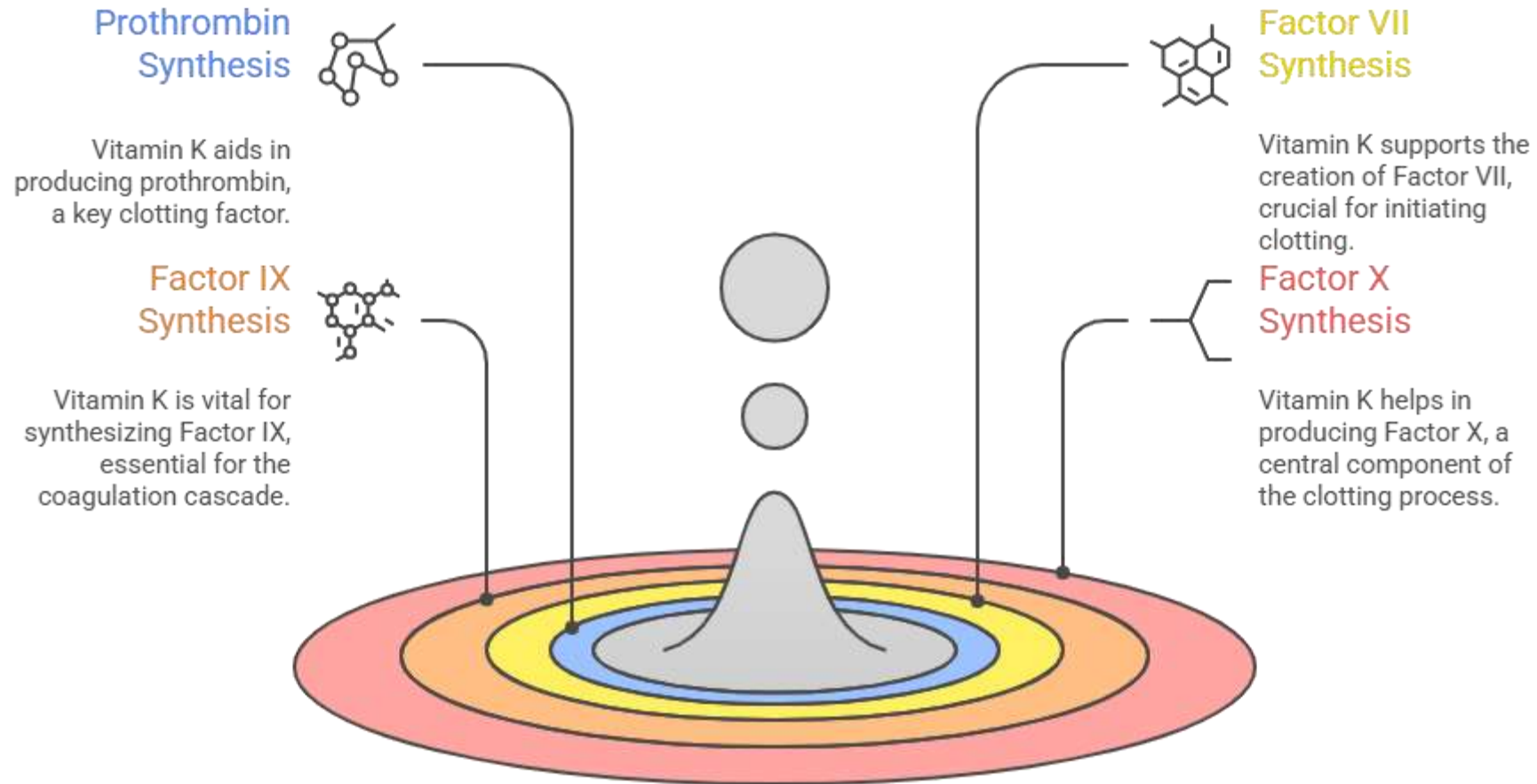


Fibrinolysis Process

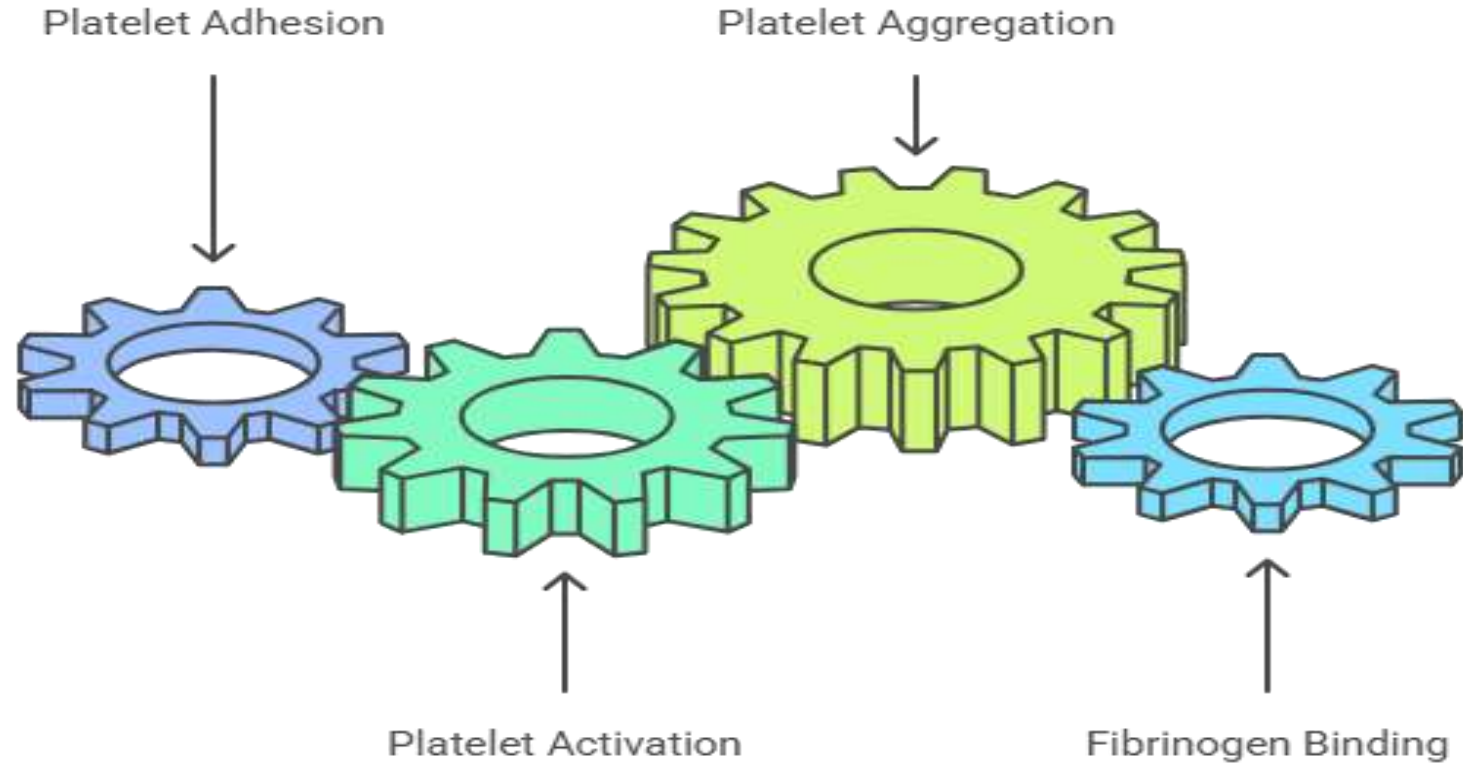


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Vitamin K's Role in Blood Clotting

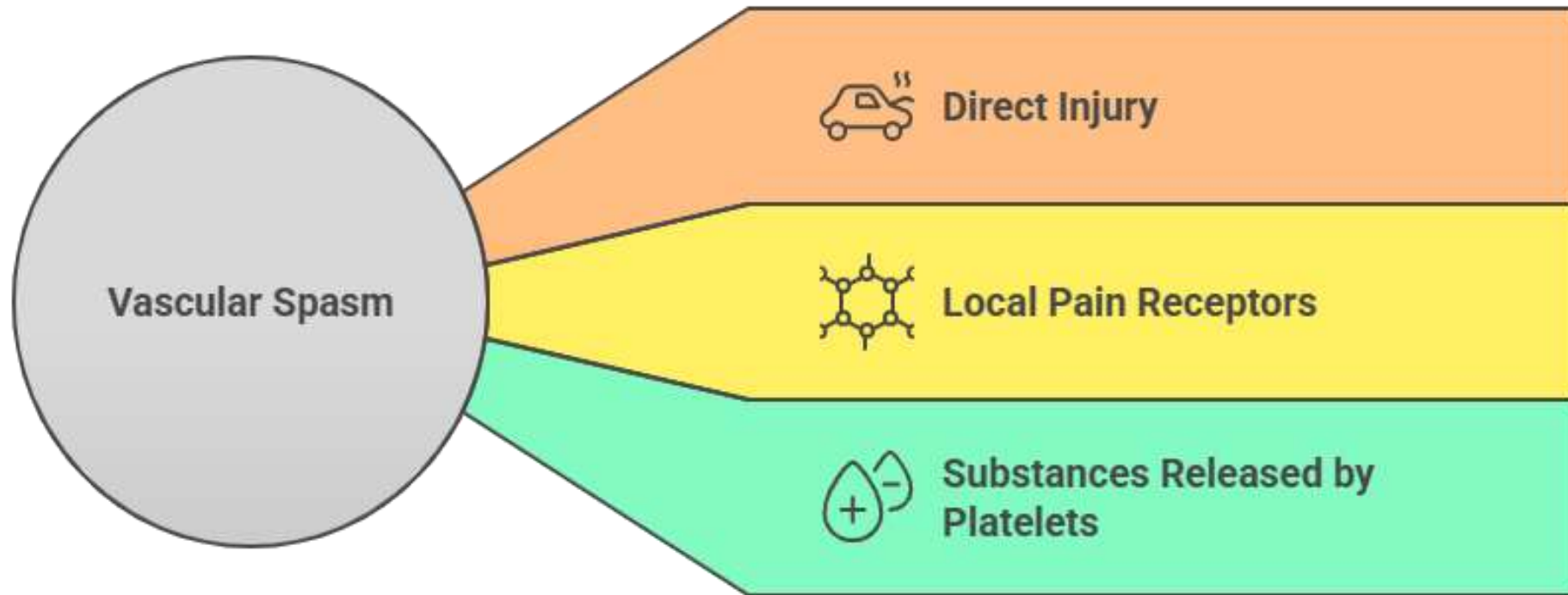


Platelet Plug Formation Process



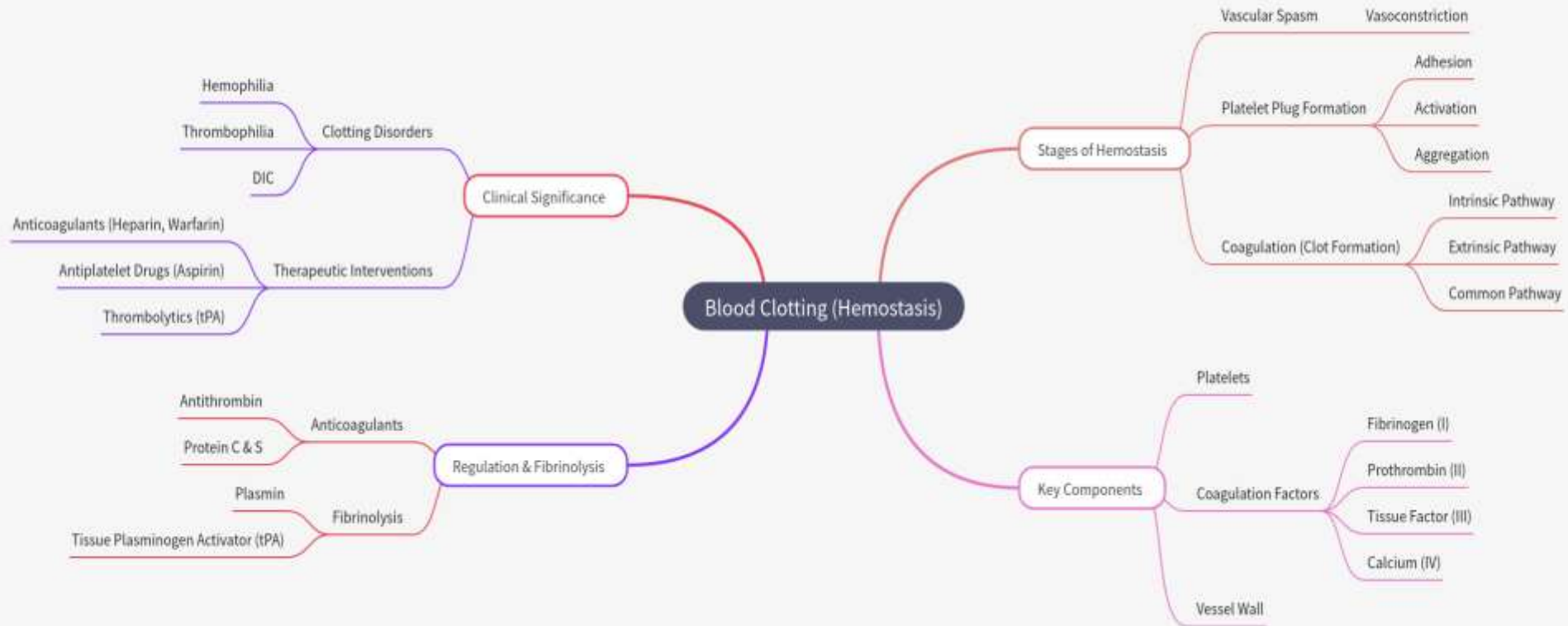
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Unveiling the Triggers of Vascular Spasm



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SUMMARY

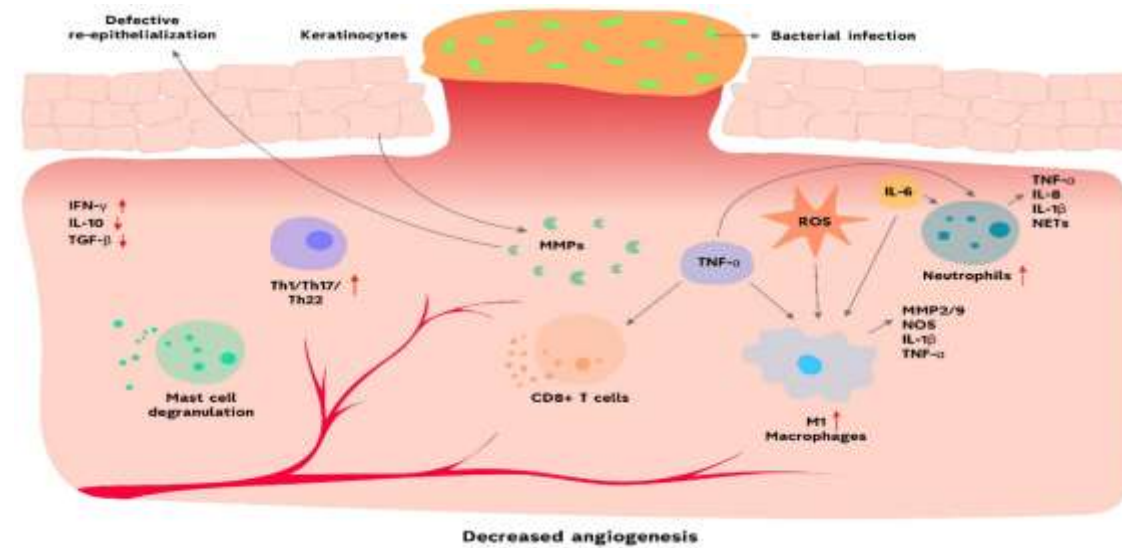


CLASS ASSESSMENTS



1. Tissue plasmin activator _____

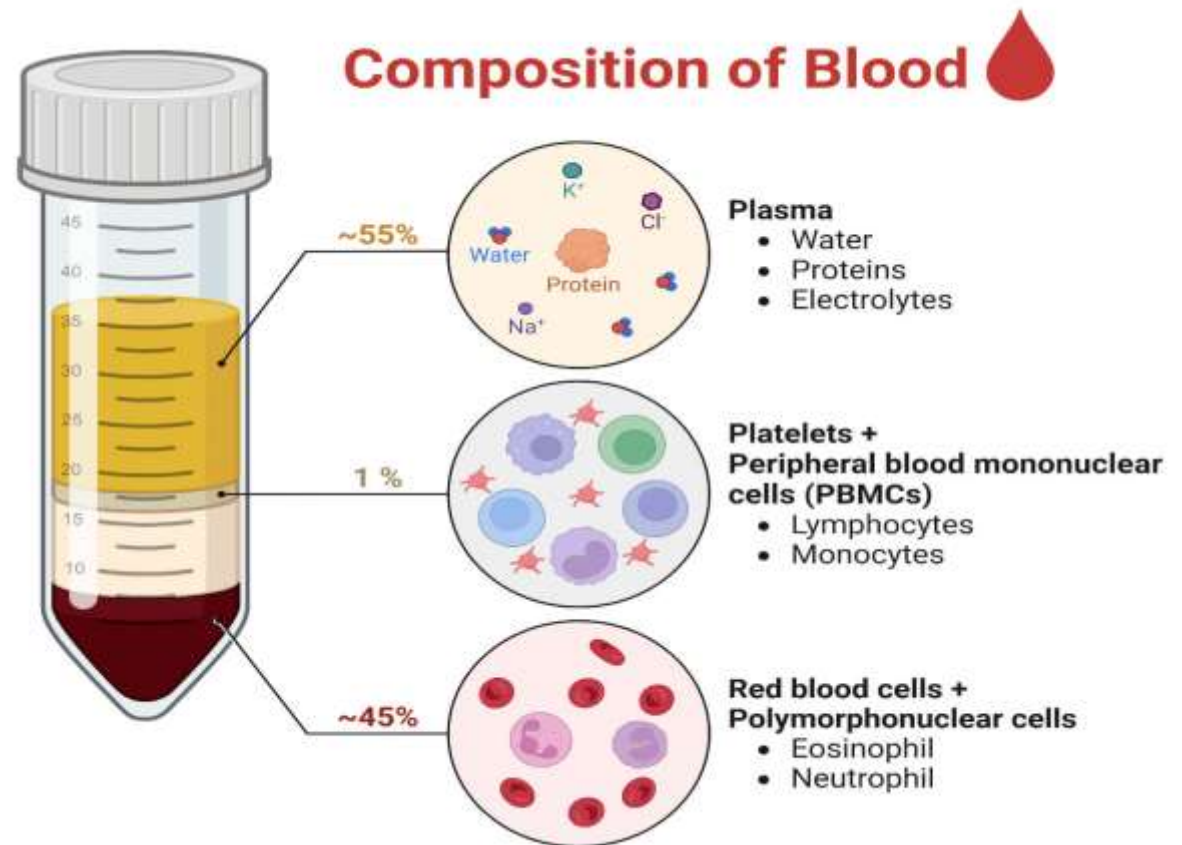
- a) Helps in wound healing
- b) Allergy response
- c) Immunity
- d) Dissolves clot in blood vessels





2. Which of the following will not coagulate when placed separately on four slides?

- a) Blood serum
- b) Blood plasma
- c) Blood from pulmonary vein
- d) Blood from lymphatic tissue





3. The vitamin essential for blood clotting is _____

- a) Vitamin A
- b) Vitamin B
- c) Vitamin C
- d) Vitamin K



REFERENCES

1. Hoffman M, Monroe DM. A cell-based model of hemostasis. *Thromb Haemost.* 2001;85(6):958–965.
2. Davie EW, Fujikawa K, Kisiel W. The coagulation cascade: initiation, maintenance, and regulation. *Biochemistry.* 1991;30(43):10363–10370.
3. Furie B, Furie BC. Mechanisms of thrombus formation. *N Engl J Med.* 2008;359(9):938–949.
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4. Hoffman R, Benz EJ, Silberstein LE, Heslop HE, Weitz JI, Anastasi J, editors. *Hematology: Basic Principles and Practice.* 7th ed. Philadelphia: Elsevier; 2018. p. 1821–1840.
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6. Mackman N. Triggers, targets and treatments for thrombosis. *Nature.* 2008;451(7181):914–918.
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*Thank
you!*