Haemostasis

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Haemostasis is

 the process of forming clots in the walls of damaged blood vessels and preventing blood loss

 while maintaining blood in a fluid state within the vascular system

Introduction to haemostasis

Objectives

- 1. Explain the following processes
 - a. Coagulation
 - b. Anticoagulation
 - c. Fibrinolysis

2. List the mechanisms that operate in the human body to prevent excessive blood loss and explain how these mechanisms are activated

Helpful blood clotting

Website

https://www.youtube.com/watch?v=HF NWGCx Eu4

- An efficient and rapid mechanism for stopping bleeding from sites of vascular injury is essential for survival
- Such mechanism has to be tightly controlled to prevent extensive clot formation and to breakdown such clots once damage is repaired
- Haemostatic system has delicate balance between the mechanisms of
 - Procoagulation (coagulation)
 - Anticoagulation and fibrinolysis

Components of haemostatic mechanism

- 1. Platelets
- 2. Coagulation factors
- 3. Coagulation inhibitors
- 4. Components of fibrinolysis
- 5. Blood vessels

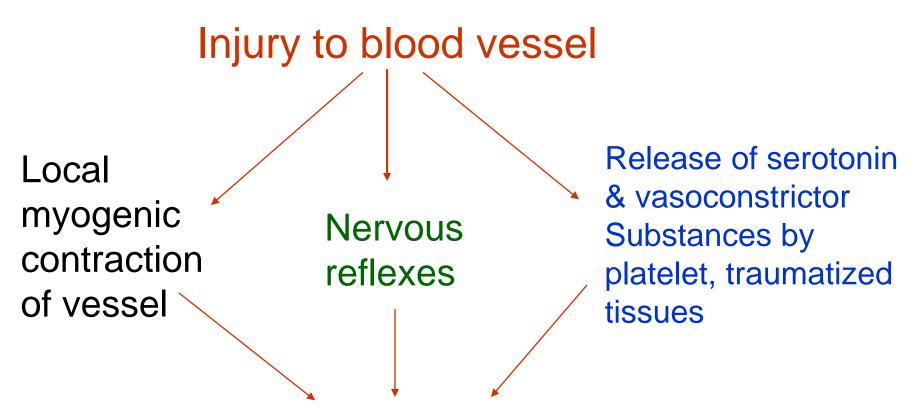
Prevention of blood loss

Excessive blood loss is prevented by

- 1. Vascular spasm (vasoconstriction)
- 2. Formation of platelet plug
- 3. Formation of definitive blood clot
- 4. Growth of fibrous tissue in to clot

1. Vascular spasm

Mechanisms causing vascular spasm



Vascular contraction & obliteration of injured vessel

Occur immediately

Lasts for minutes