

This continues as more platelets Congregate<sup>2</sup> and undergo these same transformations. This process results in a platelet plug that seals the injured area. If the injury is small, a platelet plug may be able to form and close it within several seconds. If the damage is more serious, the next step of blood clotting will take place.

### 3. BLOOD CLOTTING OR COAGULATION.

The platelet plug is not enough to stop the bleeding, the third stage of haemostasis begins; The formation of a blood clot. First, blood changes from a liquid to a gel. At least 12 substances called clotting factors take part in a series of chemical reactions that create a mesh of protein fibres within the blood. Each of the clotting factors has a very specific function. Three of the substances discussed here:— prothrombin, Thrombin and fibrinogen.

#### PROTHROMBIN:—

When blood vessels are damaged, vessels and nearby platelets are stimulated to release a substance called prothrombin activator.

which in turn activates the conversion of prothrombin, a plasma protein, into an enzyme called thrombin. This reaction required Calcium ions.

ASPIRIN— By inhibiting platelet activation, aspirin limits blood clotting in general. Aspirin is used clinically as a blood thinner. In individuals that are at risk for developing life-threatening clots. ~~these~~ patients with advanced atherosclerosis take one baby aspirin per day to reduce the probability of heart attack and stroke.