

PLATELET GROWTH FACTORS

Under a microscope, three visible elements of blood are white blood cells, red blood cells, and platelets.

Platelets have the special role of initiating a blood clot naturally to stop a bleeding injury. Platelets have another crucial role in signaling in the region that an injury has occurred, and healing must begin.

Naturally, in an area of acute tissue injury, platelets bind to proteins in the blood (fibrinogen and fibrin) to create the clot gel matrix. In this process of clot formation, growth factors from the platelets are released. These growth factors reduce inflammation and are fundamental to initiating the healing process.

Using a process to collect and activate the release of platelet products from a person's own blood, the platelet growth factors can be applied to painful areas or wounds to promote and accelerate healing.

Some common platelet factor producing techniques used in treating pain:

- > PRP- Platelet Rich Plasma
- > Platelet Lysate
- > Autologous conditioned serum
- > Platelet rich fibrin
- > Serum

There are differences in the above based on cost, preparation method, purity, and concentration of platelet growth factors.

Because of the anti-inflammatory and regenerative features of platelet growth factors, these can be applied with benefits to a variety of tissue types (see "vampire facials" for skin and "P-shots" for improving erectile dysfunction) with benefits.