

Is the use of autologous platelet-rich plasma gels in gynecologic, cardiac, and general, reconstructive surgery beneficial?. [Review]

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Abstract:

Tissue repair at wound sites begins with clot formation, and subsequently platelet degranulation with the release of platelet growth factors, which are necessary and well-regulated processes to achieve wound healing. Platelet-derived growth factors are biologically active substances that enhance tissue repair mechanisms, such as chemotaxis, cell proliferation, angiogenesis, extracellular matrix deposition, and remodeling. This review describes the biological background and results on the topical use of autologous platelet-rich plasma and platelet gel in gynecologic, cardiac, and general surgical procedures, including chronic wound management and soft-tissue injuries.