Pivotal Role of PRGF in Regeneration and Healing

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ABSTRACT

Nowadays, Medicine is rapidly moving towards the development of non-invasive treatments and personalized strategies to achieve a more predictable and optimal tissue regeneration. Several procedures are performed in an attempt to regenerate lost tissues and enhance the healing process.

A combination of stem cells, scaffolds and growth factors which are used for tissue engineering, offer favorable results for regeneration of injured or lost tissues.

Growth factors – a class of biologically polypeptides – provide a new paradigm to understand regenerative medicine, and hence play an important role in the healing process; and when are adjacent to other moderators, particularly PRGF - which is obtained from the patient's own blood, considered as an autologous plasma preparation enriched in proteins and prepares the environment for the growth factors, cytokines and adhesive proteins – accelerate and enhance tissue repair and thus, the ultimate regeneration. Moreover, PRGF has shown to be capable of reducing the intensity and the duration of postsurgical pain, declining the discomfort of the patient, accelerating the wound re-epithelialization, decreasing the healing time and controlling Edema and bleeding.

This presentation investigates the effects of plasma rich in growth factors (PRGF) on the healing of wounds and regeneration of tissues in various branches of medicine and dentistry.