

Novelties in additive manufacturing and bio-printing



Abstract

The use of autologous materials such as platelet-rich fibrin (PRF) and advanced platelet-rich fibrin (A-PRF+) for enhancing wound healing and repairing damaged tissue is a reality. Patient's own blood can be processed without addition of anticoagulants in order to obtain a tridimensional fibrin network containing platelets and leukocytes (including monocytes, lymphocytes, and granulocytes) that can act as a scaffold in the early phases of wound healing. It is reported that the interaction between these cells and the fibrin matrix stimulates a slow release of growth factors that may result in a better wound healing in the early phase of this process. PRF's derivatives are widely used in oral surgery and periodontology. Bone defects in the patient's jaws can be repaired, the wound healing can be improved. In vitro and in vivo studies shows advantages of these autologous materials in cells behavior and clinical wound healing outcome, but clinicians must be as well aware of their limitations.

Publication

Autologous pure platelet-rich plasma injections for facial skin rejuvenation: Biometric instrumental evaluations and patient-reported outcomes to support antiaging effects

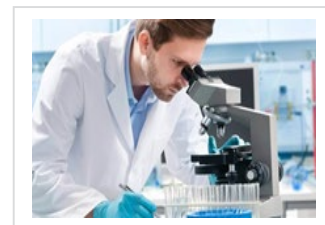
Plateletrich plasma injections for facial rejuvenation

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Biography

Luciano Pitzurra graduated in Dentistry in 2012 at the University of Cagliari (Sardinia, Italy). After graduation, he followed a Master in endodontics and conservative dentistry. Following his passion for surgical subjects, he specialized in periodontology and implant dentistry at the periodontology department of the ACTA university in Amsterdam, obtaining a Master in Oral Health Sciences in 2018. He's now PhD student and researcher in the same department, and his research is focused on the regenerative potential of autologous materials. He participated as speaker to diverse national and international meetings and is author of scientific publications in different journals. He shares his academic time working as specialist in different clinics in the Netherlands.



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