Rick Miron: Workshop

Title: Platelet Rich Fibrin in Regenerative Dentistry: From Biological Background to Clinical Applications

Abstract:

15 years have passed since platelet rich fibrin (PRF) was first utilized in regenerative medicine. Today PRF has spread across many fields of medicine and has gained momentum as a regenerative agent capable of speeding tissue revascularization. More recently, research has demonstrated that shorter and slower centrifugation cycles (known today as 'the low speed centrifugation concept') additionally favors wound healing by incorporating higher populations of white blood cells and progenitor cells within the PRF fibrin matrix. Parallel to these findings, the development of a liquid PRF may further be combined with bone biomaterials favoring particle stability, angiogenesis and tissue integration. This workshop aims to highlight the recent advancements made with respect to the newest formulations of platelet concentrates and systematically presents when, where and why specific platelet concentrates may be utilized to further speed wound healing and tissue regeneration for various clinical indications faced in routine daily dental practice. An overview and practice of phlebotomy techniques will also be presented.

Objectives:

- Provide the biological background and scientific rationale for why platelet concentrates speed wound healing
- Introduce the low speed centrifugation concept and the theory behind these PRF formulations
- Provide clinical indications when, where and why to use PRF (membranes and liquid) in regenerative dentistry
- Provide key areas into future uses of PRF for everyday dental practice