Appendix S1

SUPPLEMENTARY MATERIAL AND METHODS

Inclusion criteria for CBPG production were: negative medical history of the CB donor, CB unit volume > 50 ml (including CPD as anticoagulant), platelet count >150 × 109/l and negative CB donor screening for blood transmissible infections (hepatitis B virus, hepatitis C virus, human immunodeficiency virus, syphilis, human T-lymphotropic viruses I/II). Briefly, CB units were transferred into 100 ml bags (Biomed Device, Modena, Italy) and centrifuged at 210 g × 15 min to obtain Platelet Reach Plasma (PRP), which was collected in a 100 ml secondary bag (Biomed Device, Modena, Italy). PRP was then centrifuged at 2,000 g × 10 min; exceeding Platelet Poor Plasma was removed in order to obtain the target concentrations of 800–1,200 × 109 PLT/l and it was used for the detection of bacteria and fungi. Final Platelet Concentrates (FPC) were transferred into 10 ml storage bags (Biomed Device, Modena, Italy) and cryopreserved at –80°C without addition of cryoprotectant.

The 10 ml bags were collected in the morning of the scheduled appointment and transported to the CIR-Dental School in less than 1 h. The FPC was then heated at 37°C using a Plasmaterm H warming oven (BTI Biotechnology Institute North America, Blue Bell, PA, USA) and immediately applied to the oral lesions, followed by laser stimulation. A Lumix 2 HFPL Dental Device (Prodent Italia S.r.l., Pero, Milan, Italy) was used. Patients were exposed to a pulsed 904-nm infrared light (50 kHz, 28.4 J/cm^2 energy density, 40% duty cycle, spot size 0.8 cm); laser was used in slight contact with the tissues with a fluence of 180J (30 kHz) for 15 min. Treatment was repeated for each lesion after one day and then after a second day (T1-T2-T3).