

Ausgabe: face 2/2014

Thema: Platelet Rich Plasma (PRP): Grundlagen und ästhetische Anwendung

Autorin: Dr. Sabine Zenker

---

## Literatur

1. Beer K, Beer J. Overview of facial aging. *Facial Plast Surg* 2009; 25(5): 281-4
2. Keni SP et al. Sculptra (injectable poly-L-lactic acid). *Facial Plast Surg Clin North Am* 2007 Feb;15(1):91-7, vii.
3. Amgar G, Bonnet C, Butnaru A, Herault-Bardin F. Using objective criteria to evaluate cosmetic effects of platelet rich plasma. *PRIME* 2011; 1(6): 30-41
4. Molloy T, Wang Y, Murrell G. The roles of growth factors in tendon and ligament healing. *Sports Med* 2003; 33(5): 381-94
5. Plachokova AS, Nikolidakis D, Mulder J, Jansen JA, Creugers NH. Effect of platelet-rich plasma on bone regeneration in dentistry: a systematic review. *Clin Oral Implants Res* 2008; 19(5): 539-45
6. Sánchez M, Anitua E, Orive G, Mujika I, Andia I. Platelet-rich therapies in the treatment of orthopaedic sport injuries. *Sports Med* 2009; 39(5): 345-54
7. Marx RE. Platelet rich plasma (PRP): What is PRP and what is not PRP? *Implant Dent* 2001; 10(4): 225-8
8. Braunstein PW, Cuénoud HF, Joris I, Majno G. Platelets, fibroblasts, and inflammation: tissue reactions to platelets injected subcutaneously. *Am J Pathol* 1980; 99(1): 53-66
9. Eppley BL, Pietrzak WS, Blanton M.. Platelet-rich plasma: a review of biology and applications in plastic surgery. *Plast Reconstr Surg* 2006; 118(6): 147e-159e
10. Shen Y, Kim J, Strittmatter EF et al. Characterisation of the human blood plasma proteome. *Proteomics* 2005; 5(15): 4034-45
11. Eppley BL, Woodell JE, Higgins J. Platelet quantification and growth factor analysis from platelet-rich plasma: implications for wound healing. *Plast Reconstr Surg* 2004; 114(6): 1502–8

12. Marx RE, Carlson ER, Eichstaedt RM, Schimmele SR, Strauss JE, Georgeff KR. Platelet-rich plasma: Growth factor enhancement for bone grafts. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1998; 85(6): 638-46
13. Hom DB, Linzie BM, Huang TC. The healing effects of autologous platelet gel on acute skin wounds. *Arch Facial Plast Surg* 2007; 9(3): 174-83
14. Valeri CR, Saleem B, Ragno G. Release of platelet-derived growth factors and proliferation of fibroblasts in the releasates from platelets stored in the liquid state at 22 degrees C after stimulation with agonists. *Transfusion* 2006; 46(2): 225-9
15. Kanaide H, Uranishi T, Nakamura M. Effects of divalent cations on the conversion of fibrinogen to fibrin and fibrin polymerisation. *Am J Hematol* 1982; 13(3): 229-37
16. Martineau I, Lacoste E, Gagnon G. effects of calcium and thrombin on growth factor release from platelet concentrates: kinetics and regulation of endothelial cell proliferation. *Biomaterials* 2004; 25(18): 4489-502
17. Brass EP, Forman WB, Edwards RV, Lindan O. Fibrin formation: effect of calcium ions. *Blood* 1978; 52(4): 654-8
18. Schnabel LV, Mohammed HO, Miller BJ et al. Platelet rich plasma (PRP) enhances anabolic gene expression patterns in flexor digitorum superficialis tendons. *J Orthop Res* 2007; 25(2): 230-40
19. Martin P, Leibovich SJ. Inflammatory cells during wound repair: the good, the bad and the ugly. *Trends Cell Biol* 2005; 15(11): 599-607
20. Weibrich G, Kleis WK, Hafner G, Hitzler WE. Growth factor levels in platelet-rich plasma and correlations with donor age, sex, and platelet count. *J Craniomaxillofac Surg* 2002; 30(2): 97–102
21. Mazzucco L, Balbo V, Cattana E, Guaschino R, Borzini P. Not every PRP-gel is born equal. Evaluation of growth factor availability for tissues through four PRP-gel preparations: Fibrinet, RegenPRP-Kit, Plateltex and one manual procedure. *Vox Sang* 2009; 97(2): 110–8
22. Castillo TN, Pouliot MA, Kim HJ, Dragoo JL. Comparison of growth factor and platelet concentration from commercial platelet-rich plasma separation systems. *Am J Sports Med* 2011; 39(2): 266–71
23. Sadrzadeh SM, Graf E, Panter SS, Hallaway PE, Eaton JW. Hemoglobin. A biologic fenton reagent. *J Biol Chem* 1984; 259(23): 14354-6
24. Kumar S, Bandyopadhyay U. Free heme toxicity and its detoxification systems in human. *Toxicol Lett* 2005; 157(3): 175–88

25. Belcher JD, Beckman JD, Balla G, Balla J, Vercellotti G. Heme degradation and vascular injury. *Antioxid Redox Signal* 2010; 12(2): 233-48
26. Sundman EA, Cole BJ, Fortier LA. Growth factor and catabolic cytokine concentrations are influenced by the cellular composition of platelet-rich plasma. *Am J Sports Med* 2011; 39(10): 2135–40
27. Kevy SV et al. Platelet concentrate preparation: A comparison of the Smartprep 2 with the Cascade system. Harvest Technologies, January 2010
28. Mei-Dan O, Lippi G, Sánchez M, Andia I, Maffulli N. Autologous platelet-rich plasma: a revolution in soft tissue sports injury management? *Phys Sportsmed* 2010; 38(4): 127-35
29. Scalfani AP, McCormick SA. Induction of dermal collagenesis, angiogenesis and adipogenesis in human skin by injection of a platelet-rich fibrin matrix. *Arch Facial Plast Surg* 2012; 14(2): 132-6
30. Cho JM, Lee YH, Baek RM, Lee SW. Effect of platelet-rich plasma on ultraviolet b-induced skin wrinkles in nude mice. *J Plast Reconstr Aesthet Surg* 2010; 64(2): 331-9
31. Kim DH, Je YJ, Kim CD et al. Can Platelet-rich Plasma Be Used for Skin Rejuvenation? Evaluation of Effects of Platelet-rich Plasma on Human Dermal Fibroblast. *Ann Dermatol* 2011; 23(4): 424-31