CORPOREAL REJUVENATION WITH PLATELET RICH PLASMA AS A TREATMENT FOR ERECTILE DYSFUNCTION

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Objective: Penile corporeal function is a key factor in the erection process. Rejuvenating the corporeal tissues with platelet rich plasma (PRP), which is well known for its growth and healing factors, is a possible modality that has to be explored as a potential treatment for erectile dysfunction. We review the results of this treatment that was administered at our centre.

Material and Methods: 124 patients suffering from erectile dysfunction to varying degrees and comorbidities, received 10 ml of Tru PRP (Magellan arteriocyte) penile injections according to an established protocol by the American academy of cosmetic and cellular medicine (Priapus Shot). All patients had to fill in IIEF-5 questionnaire before and at least one month after treatment. GAQ and SEP-3 questions were also assessed after treatment.

Results: Full data could only be obtained on 40 patients with mean age of 43y, range (24-80). The mean IIEF-5 score before treatment was 13 (5-20) and post treatment IIEF-5 = 17 (7-24), p < 0.001. 35 out of 40 patients (85%) felt that the treatment improved their erection hardness and in 29 patients (72%) improved their ability to engage in a successful intercourse. Mean follow up 13 weeks (4-59) 8 weeks median. There were no reported side effects or any deterioration in erectile function.

Conclusion: Platelet rich plasma is a safe and effective option for penile rejuvenation and improvement of erectile function. Larger and longer-term studies are required to standardize the dose and number of injections that would be required to obtain optimal results.

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STEM CELL CONDITIONED MEDIA PROFILES AND POTENTIAL USES IN ERECTILE DYSFUNCTION

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Objective: Proposed mechanisms of benefit of stem cells for erectile dysfunction vary. The prevailing theory involves release of trophic factors, producing a favorable microenvironment for regeneration. We measured trophic factors expressed by placental derived stem cells (PSCs), amniotic fluid derived stem cells (AFSCs), adipose derived stem cells (ADSCs) and endothelial cells (ECs) to characterize factor profiles possibly relevant to changes seen with in vivo administration.

Materials and Methods: All cell lines were cultured (ADSC, AFSC, PSC, EC) in duplicate. ADSC were used at passage less than 5, PSC were used at passages between 7 and 12, AFSC were used at passage 12.

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