

Vibrect device reported being more satisfied with their treatment than controls. Although differences in IIEF or EHS scores were not statistically significant, there was a trend towards higher erectile function in patients using the Vibrect device.

Disclosure: Work supported by industry: no.

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#### 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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#### PERICYTES IN THE CORPORA CAVERNOSA HAS RELATIONSHIP WITH ENDOTHELIAL FUNCTION IN HYPERLIPIDEMIA-ASSOCIATED ED MICE



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**Objective:** To identify if the pericytes in the corpora cavernosa has relationship with endothelial function-tion in experimental hyperlipemia C57BL6 mice.

**Methods:** The LDLR -/- C57 mice with high fat diet was chosen as the hyperlipidemia ED model. After the model was built, immunofluorescence with the recognized marker of pericytes and the electron microscopy were used to watch the distribution, morphological characteristics of the pericytes in the corpora cavernosa; furtherly, semi-quantitative Western blot was performed to confirm the expression of pericytes in the corpora cavernosa combined with immunofluorescence; Finally, we compared the changes of pericytes and endothelial function to determine whether statistically significant based on the establishment of hyperlipidemia-associated ED models, by which in order to explore the influence of pericytes on endothelial function and its possible mechanism.

**Results:** After 12 weeks of feeding fat diet, the total blood cholesterol level, triglyceride level and LDH in hyperlipidemia group were significantly higher, but the cavernous endothelial function (eNOS by Western blot) was lower than the normal control group,  $p < 0.005$ , and it is statistically significant. We found the pericytes through immunofluorescence, electron microscopy and western blot according to the recognized markers, characters of pericytes. Pericytes in the corpora cavernosa were predominately found in the capillary network of the two kinds of microvessels. For example, pericytes are located neaby the endothelial cells of the cavernous sinus for supplying blood for erection and capillary for supplying nutrition to the parenchymal tissue, and P/E is about 1 : 3. Finally, we found that the changes of pericytes (Morphology, number, immunofluorescence intensity and western blot) related to endothelial dysfunction in hyperlipidemia-associated ED mice.

**Conclusion:** We found that changes of pericytes related to the endothelial functiontion in experimental hyperlipemia C57BL6 mice, which suggest that the pericyte may play an important role in the erection.

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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