

The effect of autologous peripheral blood cells transplantation along with platelet rich plasma in the treatment of patients with stress incontinence

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Background

The aim of this clinical trial was the assessment of safety and efficacy of submucosal and periurethral injections of peripheral blood derived autologous stem cells along with platelets, and focused on outcome for six months.

Methods

An open, prospective study was conducted on 10 patients presenting with stress urinary incontinence. At the baseline (pre-operative), 1, 3 and 6 months after external urethral sphincteric and submucosal injections of peripheral blood derived autologous stem cells along with platelets, the patients were assessed according to Marshal Test, International Consultation on Incontinence Questionnaires for urinary incontinence and quality of life.

Results

Except one patient who experienced post-operative UTI and well responded to medical therapy, no major complication was observed after injection. At 6-months' follow up, all the patients considered themselves clinically cured, with 9 women were completely continent and one marked improvement. Mean age was 48.5 ± 13 years. At 1, 3, 6 months post-injection, there was a significant improvement in ICIQ-UI, ICIQ-QOL ($P < 0.05$).

Conclusion

Cell therapy consisting of intrasphincteric and submucosal injections of peripheral blood derived autologous stem cells along with platelets in patients with stress urinary incontinence is a feasible and safe procedure. The results point out those subjects cured or marked improvement in six months follow up.

Keywords: Peripheral blood, Platelets, Stem cells, Stress urinary incontinence.

Poster Presentation

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