Autologous Stem Cell in CHF(When is more effective?) Intracoronary Administration of Autologous Bone Marrow Stem Cell in Chronic Heart Failure

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Introduction:
We aimed at evaluating the clinical, laboratory and echocardiography effects of intracoronary administration of autologous bone marrow stem cell transplantation in different clinical entities of chronic Heart Failure (HF) patients.

Methods:
This procedure was carried out during an interventional study conducted in the Cardiology department from JAN 2012 to APR 2013.
The HF patients (left ventricle ejection fraction, LVEF<35%) were initially treated for 2 months, then certain clinical and par clinic tests were performed. Bone marrow aspiration was done under local anesthesia from the posterior iliac crests and its processing was done by ROYAN institute. The obtained mononuclear cells were injected intracoronary by a micro catheter through angiography. Patients were followed in 1 week clinically and after 3,6,12 months by NYHA Class, 6mwtest, uricacid and PRoBNP levels and echocardiography study.

Results:
The procedure was successfully carried out and well tolerated. Minor complications were managed. There was amelioration in clinical symptoms early after treatment, significant improvement in 6mwtest and LVEF in post MI patients and non significant changes in uric acid and PRoBNP levels were recorded.

Conclusion:
Intracoronary infusion of stem cells in chronic Heart Failure patients is simple, reasonably safe and effective especially in 6 months and post myocardial infarction patients.

Keywords: Bone Marrow Stem Cell, Chronic Heart Failure, Intracoronary Infusion.

Oral Presentation

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