P491 : Efficacy of enhance external counterpulsation in refractory angina patient with left ventricular dysfunction

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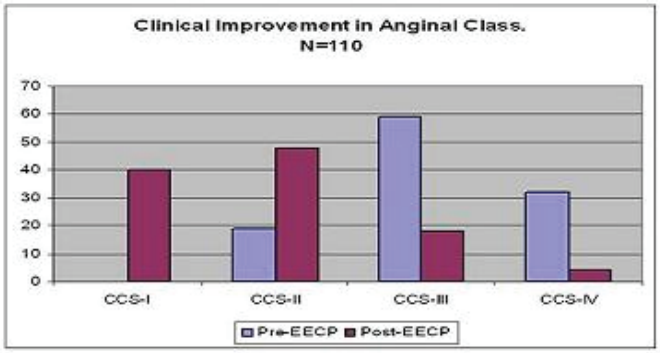
Background: Enhanced External Counterpulsation is an emerging treatment for refractory angina and Heart failure. The treatment has been shown to effectively reduce angina, improve exercise tolerance, stress Radionuclide perfusion and endothelial function. We evaluated the symptomatic improvement and safety of EECP treatment in patients who are not a good candidate for CABG and PTCA with moderate to severe Left Ventricular Dysfunction.

Method: We analyzed symptomatic improvement of 110 consecutive patients who undergone EECP treatment for chronic angina despite of maximum medication therapy and with moderate to severe left ventricular dysfunction. 50 Patients had pre and post EECP echocardiography and Left ventricular ejection fraction was recorded by Simpson method.

Results: Patients mean age of 60.71±10.31 years underwent 35 sessions. Demography includes 32% had history of prior CABG or PTCA, 68% has DM and 65% has hypertension. 92% of the patient had at least one class decrease in Canadian Cardiovascular society (CCS) functional class. Overall there is significant increase in EF from baseline pre-EECP 44.40±11.985% to 52.58±10.144% post EECP (P<0.001). In subgroup analysis in patient with EF<35% EF increase significantly from baseline pre-EECP 30.14±4.016% to 44±9.265% post EECP (P<0.001).

Conclusion: Refractory Angina patients with moderate to severe Left ventricular dysfunction undergone Enhanced External counter pulsation has shown significant improvement in anginal class and left ventricular ejection fraction.



Clinical improvement in angina class.