OUTCOMES OF CARDIAC REHABILITATION IN ELDERLY PATIENTS

Poster Contributions
Hall C
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Introduction: Cardiac rehabilitation has been well proven to be beneficial in patients after major cardiac events or interventions. The benefits of cardiac rehabilitation have not been well studied in elderly patients.

Purpose: We want to analyze if the patients with advanced age derive comparable benefit as younger patients. Also, we want to study if they need extra interventions to improve their outcome. The cutoff for the elderly was kept as 70 years or more of age to increase the sensitivity of the study.

Patients and Methods: We collected data for all the patients enrolled in phase II cardiac rehabilitation program from 2010 to 2012. They were enrolled in the rehabilitation program for 8-12 weeks. A total of 201 patients were enrolled but data was analyzed for 120 patients out of which 80 were males and 35 were females. 46 patients were 70 years or older. The data was analyzed by a professional statistician using SAS software.

Results: At baseline, elderly patients had higher weight, BMI and waist circumference and triglycerides (p<0.05). On comparing various outcomes between pre and post rehabilitation, these patients derived significant benefit in the following parameters: Weight reduction in kg (183.0 vs 179.5, p<0.001), BMI (kg/m2)(29.0 vs 28.3, p<0.00), diastolic bp (mmHg)(71.3 vs 68.3, p=0.02), total cholesterol (166.0 vs 150.8, p<0.01), LDL (95.7 vs 83.5, p=0.02), exercise volume (minutes/week)(64 vs 210, p<0.0001), glucose (mg/dL) (139.0 vs 117.0, p<0.05) and METs (2.4 vs 3.38, p=0.00). Non-significant changes were seen in waist circumference (inches) (37.1 vs 37.3, p=0.2), systolic bp (mmHg) (124.8 vs 125.1, p=0.89), HDL (43.0 vs 42.2, p=0.19) and triglycerides (129.2 vs 116.9, p=0.06). On the other hand, Patients younger than 70 years of age improved in all parameters except HDL.

Conclusion: As per our study, elderly patients derived significant and comparable benefit from cardiac rehabilitation in various parameters although these patients had higher weight, BMI and waist circumference at baseline. Extra benefits seen in younger age group could be due to larger sample. Older patients should be encouraged to participate in these programs.