A STRESS INDUCED FALL IN EJECTION FRACTION WITHIN THE NORMAL RANGE DOES NOT ADVERSELY EFFECT LONG AND SHORT TERM SURVIVAL

ACC Poster Contributions
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Background: We sought to establish the prognostic significance of a stress induced fall in EF >=10 in patients with normal baseline systolic function whose EF falls with stress but remains within the normal range.

Methods: 5,600 pts underwent gated, nuclear myocardial SPECT stress testing over a period of 6 years. Pts were followed prospectively and mortality assessed from the centralized Veterans Affairs electronic medical record (CPRS-VISTA). All cause mortality was compared between patients with normal systolic function where a post stress EF remained unchanged and those patients whose post stress EF remained within the normal range but decreased by >= 10

Results: A total of 1441 pts had a normal resting systolic function that remained unchanged with stress while 139 pts demonstrated a stress induced fall in EF >=10 while still remaining within the normal range (>=46%). Both groups were similar with respect to age (63 +-14; 65+-12 yrs), weight 197+-46;199+-52 lbs), and resting blood pressure (128+-20; 128+-20 mmHg; p=ns). Resting EF was significantly higher (59+-8%; 68+-7%; p<0.05) in those pts where stress induced a EF fall of >=10 while still remaining in the normal range. During a follow up period of 6 yrs survival was 94% at 1 yr, 85% at 3 yrs, & 78% at 5 yrs with no differences between the two groups.

Conclusions: In patients with normal resting systolic function a stress induced fall in EF>=10 when remaining within the normal range does not have an adverse effect to survival.