

D-RIBOSE MAINTAINS EJECTION FRACTION FOLLOWING AORTIC VALVE SURGERY. R. A. Vance, S. Einzig, K. Kreisler, J. St. Cyr. University of West Virginia, Morgantown, West Virginia, 26506-9134; Bioenergy, Inc., Minneapolis, MN 55304

D-Ribose has demonstrated in animal studies to increase myocardial high energy phosphate compounds and function following ischemia. A clinical study was designed to test this hypothesis in 20 patients with an entrance ejection fraction (EF) of at least 35% to receive either D-Ribose in D5W (10 patients) or D5W alone (10 patients) for 5 days peri-operatively, who underwent aortic valve surgery alone or with coronary artery bypass. Eighty percent of the placebo patients demonstrated a decline at day 7 in EF of greater than 15% (range 15-56%) from baseline. Twenty percent of the D-Ribose treated patients had a decline in EF at day 7 of greater than 15%. No significant changes between either group or within each group was noted in altered myocardial chamber dimensions or hemodynamic parameters. This study suggests that the supplementation of D-Ribose may prevent deterioration of left ventricular function peri-operatively in patients undergoing aortic valve surgery alone or in combination with coronary artery bypass.

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