

EFFECT OF A BEHAVIORAL MODIFICATION PROGRAM ON PROTEINURIA IN THOSE WITH TYPE 2 DIABETES

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Background: ENHANCE is a RCT to test a behavioral intervention based on Social Cognitive Theory to improve adherence to the complicated medical regimen required of those with type II diabetes. The behavioral intervention includes initial weekly group meetings followed by individual counseling re diet, exercise, glucose monitoring and use of a PDA to monitor dietary intake and physical activity, with a tapering schedule of frequency of follow-up over 6 months.

Methods: Study participants had urinary albumin/creatinine ratio (ACR) measured at time 0, 3, and 6 mo. We examined the subset of participants with baseline ACR > 30 mg/g.

Results: 47 patients had baseline ACR > 30 mg/g. Average age was 58± 13, 41% were male, 30% were African American. 25 were randomized to the intervention arm (I) and 22 to control (C). sBP was 145mmHg vs 142 and dBP 80mmHg vs 79 in I and C respectively at baseline (NS). Change in ACR was a decrease by 41.2 vs an increase of 34.2 mg/g (p=0.08) at 3 mo, and decreases of 199.0 vs 36.1 mg/g (NS) at 6 mo in I and C groups respectively.

Conclusions: The difference in ACR reduction was marginally significant at 3 months. Following a reduction in the intensity of the intervention, the difference was not sustained at 6 months. While this RCT was not designed to reduce proteinuria, these preliminary results suggest that trials to improve self management of the complicated regimen of patients with diabetic nephropathy deserve further study to examine impact on CKD risk.