Decrease in Urinary Incontinence Management Costs in Women Enrolled in a Clinical Trial of Weight Loss to Treat Urinary Incontinence

L. L. Subak, A. Marinilli Pinto, R. R. Wing, S. Nakagawa, J. W. Kusek, W. H. Herman and M. Kuppermann; Program to Reduce Incontinence by Diet and Exercise

Department of Obstetrics, Gynecology and Reproductive Sciences, University of California San Francisco, San Francisco, California


OBJECTIVE: To estimate the effect of a decrease in urinary incontinence (UI) frequency on UI management costs among women enrolled in a clinical trial of a weight loss intervention and to identify factors that predict change in cost.

METHODS: This is a secondary cohort analysis of 338 obese and overweight women with 10 or more weekly episodes of UI enrolled in an 18-month randomized clinical trial of a weight loss intervention compared with a structured education program to treat UI. Quantities of resources used for incontinence management, including pads, additional laundry, and dry cleaning, were reported by participants. Direct costs for UI management (“cost”) were calculated by multiplying resources used by national resource costs (in 2006 U.S. dollars). Randomized groups were combined to examine the effects of change in incontinence frequency on cost. Possible predictors of change in cost were examined using generalized estimating equations controlling for factors associated with change in cost in univariable analyses.

RESULTS: Mean age±standard deviation was 53±10 years and baseline weight was 97±17 kg. Mean weekly UI frequency was 24±18 at baseline and decreased by 37% at 6 months and 60% at 18 months’ follow-up (both P<.001). At baseline, adjusted mean cost was $7.76±$14 per week, with costs increasing significantly with greater incontinence frequency. Mean cost decreased by 54% at 6 months and 81% at 18 months (both P<.001). In multivariable analyses, cost independently decreased by 23% for each decrease of seven UI episodes per week and 21% for each 5 kg of weight lost (P<.001 for both).

CONCLUSION: In obese and overweight women enrolled in a clinical trial of weight loss for UI, incontinence management cost decreased by 81% at 18 months ($327 per woman per year) and was strongly and independently associated with decreasing incontinence frequency.