

Effects on body weight of a 1-year three-component lifestyle RCT in obese PCOS women.

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CONTEXT

Obesity in women with polycystic ovary syndrome (PCOS) negatively affects all clinical features. There is a large number of small uncontrolled (two-component) trials demonstrating that losing 5 to 10% of initial body weight has shown promising results on reproductive, metabolic and psychological level. Weight loss programs seem to be effective in the short term; however, most of the initial weight loss is regained within 1 year. The biggest challenge is to achieve a reasonable and sustainable weight loss.

OBJECTIVE

The aim of this study is to explore whether Cognitive Behavioral Therapy (CBT) performed by a multidisciplinary team (a three-component intervention), is more effective for weight loss in the long term compared to usual care; weight loss through publicly available services (control group).

METHODS

The 1-year lifestyle intervention consists of 20 group sessions. After 3 months participants are randomly assigned to additional E-health support. The control group receives 5 unstructured consultations with their treating physician.

PATIENTS

We included a total of 210 patients diagnosed with PCOS according to the Rotterdam criteria, with a BMI >25 kg/m² and a wish to conceive.

MAIN OUTCOME MEASURES

The main outcome is weight. Outcome variables were measured at the start of the study, at three, six, nine and twelve months.

RESULTS

We achieved significantly ($P < 0.001$) more weight loss in the lifestyle intervention group, mean weight loss -6.05%, 95% confidence interval (CI) [-7.43, -4.67] within one year compared to the control group, mean weight loss -1.54%, 95% CI [-3.36, 0.29]. Body Mass Index at baseline was no predictor for weight loss.

Waist circumference significantly decreased in both groups: - 4.84%, 95% CI [-6.48, -3.21] and -4.75%, 95% CI [-6.98, -2.51] respectively, but there was no difference between the lifestyle intervention and controls ($P = .944$). Hip circumference also decreased significantly: -4.17%, 95% CI [-5.04, -3.31] versus -2.14%, 95% CI [-3.30, -0.97] and significantly more ($P = .006$) in the lifestyle intervention group.

CONCLUSIONS

A three-component CBT lifestyle intervention for obese women with PCOS achieved a reasonable and sustainable weight loss of 5-10%. Self-induced weight loss by publicly available services is found to be

less effective in obese PCOS women. The difference in effect was pronounced for hip, not for waist circumference.

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