
Efficacy of dieting or exercise vs control in obese osteoarthritis patients after a clinically significant weight loss: a pragmatic randomized controlled trial.

Obesity Reviews 2010; 11 (suppl 1): 248 (T3:PO.83)

Abstracts of the International Congress on Obesity, Stockholm, Sweden, July 2010

EFFICACY OF DIETING OR EXERCISE VS. CONTROL IN OBESE OSTEOARTHRITIS PATIENTS AFTER A CLINICALLY SIGNIFICANT WEIGHT LOSS:
A pragmatic randomized controlled trial


Introduction:
We hypothesised that a dietary program rather than an exercise regimen would maintain a clinically significant weight loss in obese patients with knee OA.

Methods:
Obese individuals (>50 years) having knee OA (ACR criteria), followed a VLED or LED (formula diet) for 8-weeks and 8 weeks on a 1200kcal/d part food/part formula diet [1], and were then randomised to either 1-year maintenance program with [D] continuous dietary consultations and formula diet use, [E] exercise programs lead by a physiotherapist, or [C] a control group receiving no support from the project team for 1 year [2]. The amount of attention was the same in D and E, preventing performance and detection bias. The statistical analyses were based on a non-responder ITT basis.

Results:
192 participants, mean age 63 y (SD:6), weight 103.2 kg (15.0), and BMI 37.3 (4.8) were randomized. Mean weight loss after 1 year on D, E, and C was 10.9, 6.3, and 8.2 kg, respectively (ANCOVA: \( P=0.003 \)); D lost more than E: 4.6kg (95%CI: 2.0 to 7.3; \( P<0.001 \)). Those having an OMERACT-OARSI response (the primary endpoint) at week 68 in the D, E, and C groups were 30 (47%), 24 (38%), and 30 (47%), respectively (\( P=0.47 \)); ie, no difference between D and E.

Conclusions:
Weight loss was significantly better in the diet group, but there was no evidence that, in terms of OA symptoms, following a 1-year dietary maintenance program was better than exercise.


--------------------

1. Conflict of Interest: A. R. Leeds is employed as medical director of the Cambridge Manufacturing Company [Cambridge Weight Plan ®]. Pia Christensen, Henning Bliddal, Birgit Falk Riecke and Robin Christensen received travel grants to attend scientific meetings from the Cambridge Manufacturing Company.

2. Funding: The study was supported by grants from the Oak Foundation; the Velux Foundation; the Cambridge Weight Plan, UK; the Danish Rheumatism Association; the Augustinus Foundation; the A.P. Møller Foundation for the Advancement of Medical Science; the ‘Aase og Ejnar Danielsens fond’ and the Hoerslev Foundation.