Sammanfattning av Hjördis Björvells avhandling, Stockholm 1985

”Treatment of severe obesity: Long term follow-up, personality traits, eating behavior and effects of peroral glycerol in obese subjects”

6. SUMMARY and CONCLUSIONS

The main purpose of this study has been to develop and evaluate a combined behavioural weight reduction program for severely obese patients including support for further weight reduction or weight loss maintainance during a period of four years. The treatment program comprised behavioural modification techniques, exercise, preparation of low caloric food (2.4 MJ, 600 kcal/day), booster sessions and in addition, readmission of relapsed patients. One hundred and seven patients (81 women) entered the program. Thirty-nine of these were initially jaw fixed (median 6 months).

Clinical data could be retrieved from 104 out of 107 patients at the four year follow-up. Two patients had died and 20 patients had left the program. Eleven subjects were still in the follow-up program. For the remaining 74 subjects the average weight loss was highly significant, 11.7 kg, ($p<.001$) range -20.0 - 55.5 kg. Nineteen percent of the subjects had lost more than 20 kg, 47% had lost 5 - 20 kg, 23% had lost 0 - 5 kg and 11% of the subjects were above pretreatment weight.

To assess eating behaviour in the treated obese patients after two and a half years the Three-Factor Eating Questionnaire, developed by Stunkard et al, was used. The first factor measures "cognitive restraint of eating". In this test treated patients scored higher, were more restrained, than untreated obese subjects and nonobese controls. The treated patients who scored above median value had lost significantly more weight than those who scored equal to or below the median value. The second factor measuring "disinhibition" and the third factor measuring "hunger" did not differentiate the treated and the untreated obese groups from each other. The non-obese subjects had significantly lower scores in these second and third factor scales than the obese groups.

Personality characteristics of the obese patients were measured by the Karolinska Scales of Personality developed by Schalling et al. The obese patients showed higher scores in the Somatic Anxiety, Muscular Tension, Impulsiveness, Monotony Avoidance scales and lower scores in the Socialization scale as compared to control groups. This pattern constitutes an "impulsiveness syndrom" which commonly is attributed to alcohol and drug abusers. Patients who had chosen the jaw fixation program were less psychasthenic and more monotony avoiding than patients who chose behavioural treatment only.

Preloads of small amounts of glycerol, which has been suggested to be a

physiologic appetite regulator, reduced food intake in nonobese volunteers. An equicaloric solution of glucose did not give such a reduction. However, when glycerol was given in a double blind study as a supplementing agent in combination with dietary restrictions to members of a commercial weight-reducing club, there was no additional effect of glycerol on weight loss.

In conclusion, this study has shown that a combined behavioural treatment program for obesity with long-term follow-up might enable several severely obese patients to change eating behaviour, lose weight and maintain weight loss over long time. In addition such a program can be designed to keep attrition rate low.

Early success in weight reduction seems to predict later success. Therefore it is vitally important to give all possible support to patients who tend to be less successful in the beginning of the program in order to enable them to achieve a successful loss of weight later on. Those who console themselves with food and therefore gain weight after treatment form a group which might benefit from more intensive training in relapse prevention.

The obese patients studied differ in personality traits not only from the normal population but also within the obese group. The personality traits found in the obese subjects might influence the eating behaviour and might predict outcome of treatment in these individuals.

Although reducing food intake in an acute situation glycerol, a suggested physiological appetite regulator, was not found to be of value as a complement during long-term weight reduction.

Obesity is a complex disorder with a physiological, psychological and social origin. The ultimate goal of the treatment for this disorder should be to help people reduce, eliminate or prevent behaviours leading to such a condition. Our results indicate that a combined broad-minded approach with repeated opportunities for relapsing patients to return to the program can considerably improve the long-term results of non-surgical treatment for severe obesity.