Media-assisted weight reduction in overweight people - first casuistics.

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Summary

Background: Obesity with its health consequences is an increasing problem in Europe and especially in Germany. Conventional strategies for weight reduction mediate behavioral changes on a cognitive, behavioral level. After the end of the intervention, most patients gain weight again. Media-assisted weight loss is intended to lead to sustained weight loss by achieving lasting behavior change on an emotional level by addressing subconscious regions in the central nervous system.
Methods: 10 months and 18-24 months after a weekend seminar introducing the method of media-assisted weight reduction, patients were asked about their weight. The content of the obesity guidelines is delivered through a behavioral therapeutic intervention that appeals to the subconscious mind and includes elements of aversion therapy and reinforcing behavior therapy. The medium is standardized, discussed and musically underscored CD's that build on each other. These contain "negative scenes", "positive scenes" and "harmony scenes". They should be listened to daily. During the seminar it was explained that one may eat anything one feels like. At the end of the seminar the patients received CDs with different negative and positive scenes as well as harmony scenes.
Results: All ten patients were able to reduce their weight moderately to very significantly, by an average of 16 kg or 16% of their initial weight. No patient gained weight again.
Conclusion: With the method of media-assisted weight reduction, patients can successfully lose weight themselves after only one weekend. Even after 18 to 24 months, the weight reduction persists. These casuistic, impressive results should be verified in a prospective, randomized study with a large number of cases.

Keywords: obesity; weight loss; aversion therapy; media-assisted weight loss.

Abstract

Case reports about weight loss with a media-supported weight-loss program

Background: Obesity is a major public health problem that has reached epidemic proportions in Europe and Germany respectiveley. Common diets convey behavior changes by rational way. After end of intervention many of the patients regain weight.With media-supported program, weight loss could remain for a long time by achieving change of behavior by an emotionally subcon- sciously way.
Methods: Ten patients with overweight or obesity participated in a weekend seminar. In this seminar, elements of behavioral and aversion therapy were used to convey principles of weight loss. Moreover, all patients received audio CDs containing spoken text and music that connoted hypercaloric food with "negative scenes" but also contained "positive scenes" and "harmony scenes". All patients were instructed to listen to these CDs every day. Weight loss was controlled 10 in all and 18-24 months in some patients after onset of the intervention.
Results: All patients lost weight. Average weight loss was 16 kg (-16%). A further weight reduction was seen in those patients studied after 18-24 months. No patient regained weight.
Conclusion: A media-supported weight-loss program is effective in sustained weight loss. These results should be confirmed in randomized, controlled studies.

Keywords: obesity; weight loss; aversion therapy; media supported weight-loss program

1 Introduction

Overweight (body mass index - BMI ≥ 25) and obesity (BMI ≥ 30) have reached epidemic proportions in Western societies (Philip and James 1998,
Seidell 2000). The prevalence of overweight has tripled in the last 30 years (Volkow and Wise 2005). In Germany, from 1985 to 2002, a total of 12,984 men and 13,630 women were assessed for their body weight.

importantly examined. The percentage of women with a BMI > 30 increased from 16.2% to 23.5% and of men from 16.2% to 22.5% in 1985 to 2002, while the percentage of women with a BMI > 35 increased from 4.5% to 7.5% and of men from 1.5% to 5.2% (Helmert and Strube 2004). Other studies also report an increase in adi- positas in Germany: in 1998, 18.3% to 24.5% of Germans would have a BMI > 30 and 31.1% to 48.7% would have a BMI of 25-29.9 (Bergmann et al. 1999). This means that only one third of adults in Germany have a health-desirable body weight.

Overweight and obesity are associated with serious diseases and risk factors for health. For example, 50% of people with obesity have high blood pressure and 70% of people with hypertension are overweight (Mast et al. 1999, Expert Panel 1998). Adipo- sitas is an independent risk factor for the development of hypertension (Ko et al. 2005) and is associated with insulin resistance and atherogenic lipoprotein profile; ab- dominant obesity is an independent risk factor for vascular mortality (Hoefele et al. 2005). Diabetes and cardiovascular disease are particularly associated with abdominal obesity (Chaput et al. 2005, Schneider et al. 2006). Overweight and obesity are risk factors for cardiac arrhythmias (Frost et al. 2005).

In Switzerland, diabetes is most commonly associated with obesity, followed by hypertension, esophageal cancer, gallstones, coronary heart disease, and depression (Neilson and Schneider 2005).

Recently, a clear correlation between diabetic foot and overweight and obesity has been demonstrated (Pinzur et al. 2005).

One hallmark of the metabolic syndrome is abdomi- nal obesity. Others are elevated triglycerides, low HDL cholesterol, elevated blood pressure and diabetes. Patients with metabolic syndrome have a significantly increased risk of stroke (Koren-Morag et al. 2005).

Compared to normal weight people, overweight and obese people have a significantly increased mortality risk, which is probably decreasing due to better medical care in the last 30 years (Flegal et al. 2005, Adams et al. 2006). This is also reflected in the decrease of risk factors for cardiovascular disease especially in overweight and obese people in the last 40 years. The risk factors hypertension, smoking and high choles- terin levels decreased significantly more in the overweight and obese compared to the normal weight (Gregg et al. 2005).

Conventional weight loss strategies mediate behavior change at a rational level. Low-caloric diet and physical exercise usually lead to short- and medium-term success. However, there is often a renewed and sometimes even increased increase in weight after the intervention has ended (Gardner et al. 2007, Brehm et al. 2003, Foster et al. 2003, Hensrud 2001).

Media-assisted weight reduction attempts to achieve a permanent change in behavior on an emotional level. In addition, media-assisted weight reduction enables the patient to continue using this method independently even after the end of the therapy phase. We assume that this will lead to a lasting reduction in weight. In this study, we wanted to investigate the effect of media-assisted weight reduction as part of an open pilot project.

2 Methodology

Ten patients who had participated in a weekend seminar of media-assisted weight loss between fall 2005 and spring 2007 were retrospectively interviewed about their weight loss ten months after the first seminar and/or on July 4 and 5, 2007. The initial weight had been determined at the seminar. Patients were included who reported that they "felt" or "felt disgusted" during the negative scenes they heard and who had at least a BMI greater than 30 or a BMI between 25 and 30 if they felt uncomfortable with their weight at the same time. At least two measurement time points had to be reached: Measurement time point 1 before the seminar, measurement time point 2 after ten months at the latest, measurement time point 3 after 18-24 months. During this time, the patients did not participate in any other weight reduction program or diet.

During the two-day weekend seminar, participants were taught how media-assisted weight loss works. The contents of the obesity guidelines are conveyed through a behavioral therapy intervention that appeals to the subconscious and contains elements of aversion therapy and reinforcing behavior therapy. The medium is standardized, discussed and musically accompanied CDs, which build on each other. Every day one "negative scene", one "positive scene" and one "harmony scene" are to be listened to, two scenes of six minutes each in the morning, one scene of six minutes each in the evening. In the negative scenes, "unhealthy food" is scenically coupled with, for example, "loneliness". In the immediately following positive scene, for example, "drinking spring water" or tea is coupled with movement in a beautiful environment. A "harmony scene" serves to strengthen the ego. During the seminar it is explained that one can do everything

may eat whatever one feels like. Patients receive CDs with various negative and positive scenes as well as harmony scenes at the end of the seminar.

3 Results

Seven women and three men were examined. In all patients two measurement points could be reached, in four even three measurement points could be obtained. The average age at baseline was 48.5 years. The average height of the patients was 171 cm. The average initial weight was 102.2 kg, the average BMI 35.2. After ten months, the patients had lost an average of 16.6 kg, after 18-24 months (four patients) an average of 29.1 kg, and the BMI was reduced from 35.2 to 30.25 and 28.6, respectively. **Table 1** shows the individual courses of the patients.

4 Discussion

The results show impressively that weight can be lost with the method of media-assisted weight reduction: All patients reduced their weight within the first ten months, with some losing a very moderate amount of weight and others losing a great deal. None of the patients lost less weight than patients in large studies, in which weight loss ranged from 2.7% to 6.8% of baseline weight (Foster et al. 2003). Rather, almost all of the patients lost significantly more, an average of 16% of baseline weight. Particularly noteworthy is the fact that four patients were able to maintain their reduced weight even after 18-24 months, or lost even more weight, and did so at only one seminar, saying that they could then eat anything they felt like if they wanted to.

would only continue to use the method of media-assisted weight reduction, namely listening to the negative and positive scenes themselves on a daily basis. Studies on diets have mostly recorded an increase in weight again after the end of the diet (Gardner et al. 2007, Brehm et al. 2003, Foster et al. 2003, Hensrud 2001).

Based on the results of the present case histories, a study with a large, statistically usable number of cases should be conducted to determine whether it is possible to lose weight prospectively using the method of method-assisted weight reduction and whether the reduced weight can also be maintained in the long term. The patients should be informed that they will be followed up over a longer period of time and that they should independently apply the method on a daily basis. The study should find out whether the patients' condition and pre-existing diseases and/or pathological laboratory values improve. Furthermore, possible predictors for the response of the media-assisted weight reduction should be found.

5 Conclusion

In the casuistry described, a new the- rapy approach for overweight patients - media-assisted weight reduction - was shown to be a very successful method. In a prospective, randomized study these first results should be verified.

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Table 1: Course of weight reduction in patients (BMI = body mass index)

Age	Gender	Body height [cm]	Body weight [kg]	BMI 1	Weight loss [kg]	BMI 2	Weight loss [kg]	BMI 3
49	male	180	94	29,00	17 (18%)	23,80		
28	female	168	143	50,71	41 (29%)	32,73	78 (55%)	23,05
58	female	160	120	46,88	04 (03 %)	45,31	08 (07%)	43,75
58	female	158	91	36,40	11 (12%)	32,00		
49	female	165	82	30,15	08 (10%)	27,20		
48	female	166	104	37,68	30 (29%)	26,80		
43	female	172	85	28,70	15 (18%)	23,65	20 (24%)	21,96
48	male	190	106	29,36	07 (07%)	27,42		
44	female	170	95	32,87	18 (19%)	26,60		
60	male	184	102	30,09	15 (15%)	25,67	15 (15%)	25,67

BMI 1: before the seminar; BMI 2: after 10 months; BMI 3: after 18-24 months.

6 Literature

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