Are Group Visits Effective for the Treatment of Obesity?

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receive aspartame (approximately 30 mg/kg per day) or placebo for 7 days and then were switched to the other ingredient. Only 18 patients completed the full protocol. Patients reported headaches on 33% of the days during aspartame treatment, compared with 24% on placebo treatment ($P=.04$). Patients who were “very sure” prior to the study that aspartame triggered headaches had a headache 37% of the aspartame days and 18% of the placebo days ($P<.001$). This study was limited by poor follow-up and small sample size.¹

In a multicenter, double-blind, placebo-controlled, multiple-challenge evaluation of reported reactions to MSG, researchers recruited participants reporting adverse reactions to an Asian meal that they thought contained MSG. Participants were included only if they reported 2 or more of the following symptoms: general weakness, muscle tightness, muscle twitching, flushing, sweating, burning sensation, headache-migraine, chest pain, palpitations, or numbness-tingling. The study had 4 sequential protocols designed to test for consistency of reaction and the effect of taking MSG with food. A total of 132 participants were initially enrolled.²

In the first protocol, participants received 200 mL of a citrus-flavored beverage containing either 0 or 5 g of MSG on day 1 and the alternate beverage on the second day. Eighty-six participants reported 2 or more symptoms when MSG, placebo, or both were ingested. Only 28% (37/132) reacted to MSG and not placebo.²

Of the 86 patients with any sort of reaction in the first protocol, 69 participated in the second protocol. They were administered 200 mL of a citrus-flavored beverage that had 0, 1.25, 2.5, or 5 g MSG in a random order. Only 28% (19/69) reacted to 5 g MSG and not placebo, and 20% (14/69) had the same symptoms on multiple exposures to MSG.²

Of these 33, 12 participants were available for the next protocol where, again on alternate days, they received 5-g tablets of MSG or placebo with water. Of these 12 participants, only 2 had symptoms after MSG but not placebo. Neither of these 2 participants had the same symptoms as after MSG ingestion in the first 3 protocols.²

In the last protocol, these 2 participants were given a 5-g pill of MSG with food 3 times for breakfast. These 2 participants reported symptoms after only 1 of the 3 MSG challenges administered, and the symptoms were new.²

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**Are group visits effective for the treatment of obesity?**

**Evidence-Based Answer**

Weight loss therapy consisting of 20 to 30 lifestyle-modification group visits is associated with modest (4–8 kg) weight loss. (SOR A, based on homogeneous randomized controlled trials [RCTs].) For patients who participate in group visits, use of sibutramine (15 mg p.o. daily) and compliance with food journaling are both associated with greater weight loss. (SOR B, based on an RCT and an outcomes study.)

A 1-year RCT of 224 obese adults (body mass index [BMI] 30–45 kg/m²) compared the effectiveness of group visits for lifestyle modification with pharmacotherapy for obesity treatment.¹ Participants were randomly assigned to receive 1 of 4 treatments: 15 mg sibutramine, sibutramine with brief counseling, lifestyle-modification group visits, or a combination of group visits and sibutramine. The brief counseling consisted of 8 visits of brief lifestyle counseling with prescription renewal. The lifestyle-modification group visits consisted of 30 ninety-minute sessions with 7 to 10 participants led by trained psychologists, using the LEARN (Lifestyle, Exercise, Attitudes, Relationships, and Nutrition) program for weight control for the first 20 sessions. The last 10 sessions used the Weight Maintenance Survival Guide. Combination therapy used the same group visit curriculum as well as 15 mg sibutramine. All participants were prescribed the same diet and exercise regimen.
At the end of 1 year, the sibutramine-alone patients lost 5.0±7.4 kg, the group visit patients lost 6.7±7.9 kg, and the sibutramine plus group visit patients lost 12.1±9.8 kg (P<.001 for all comparisons in the intent-to-treat analysis). Patients in the combination group who recorded their food intake more frequently (highest third of compliance) lost more weight than participants who did so less frequently (lowest third of compliance) (18.1±9.8 kg vs 7.7±7.5 kg, P=.04).

A 6-month, multicenter RCT designed to compare methods of maintenance of weight loss recruited 1,685 (79% BMI>30) overweight and obese participants to participate in weekly group visits for weight loss. The first part of the study (phase 1) was not randomized and involved helping the patients to lose weight. Phase 2 was randomized, but only dealt with weight maintenance. Phase 1 participants participated in 20 group visits led by nutrition and behavioral counselors. The visits lasted 90 to 120 minutes, and included 18 to 25 participants. Participants attended an average of 72% of group visits.

Mean weight change of attendees was 5.8±4.4 kg, with 69% losing more than 4 kg. Participants also reported an average of 117 minutes of moderate-intensity weekly exercise and 3.7 days of food journaling per week.

Weight loss by groups was as follows: African American men (5.4±7.7 kg); African American women (4.1±2.9 kg); non–African American men (8.5±12.9 kg); and non–African American women (5.8±6.1 kg). Participants who lost more weight (non–African Americans) also attended more sessions, reported more physical activity, and kept more food records when compared with African American participants (P>.0001 for each comparison). This study was limited by the lack of a control group.

What are appropriate treatment goals for hypertension in the very elderly (≥80 years)?

Evidence-Based Answer
Decreasing blood pressure to less than 150/80 mmHg in the very elderly reduces total cardiovascular event morbidity and mortality by 25%, mainly due to a reduction in fatal cerebrovascular events. Treatment of hypertension in this subgroup does not decrease the morbidity or mortality of coronary heart disease or overall mortality. (SOR A, based on systematic reviews).

No RCTs involving the very elderly have achieved the goal of 140/90 mmHg recommended by the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC-7). All studies with patients older than 80 years reported reduction in blood pressures from baseline in the treatment versus control groups. At the conclusion of these studies, average systolic blood pressures ranged from 153 to 178 mmHg.

The Cochrane collaboration published a systematic review in 2009 quantifying antihypertensive drug effects on overall mortality. A total of 15 RCTs (n=24,055) were identified, 7 of which collected data on the treatment of hypertension in the very elderly (≥80 years). The average blood pressure reduction in these trials was from a baseline pressure of 178/88 mmHg to a treatment pressure of 162/82 mmHg.

Overall mortality in this subgroup analysis was not reduced (risk ratio [RR]=1.01; 95% confidence interval [CI], 0.90–1.11). Also, coronary heart disease mortality in the very elderly did not change significantly (RR=0.86; 95% CI, 0.60–1.22). However, stroke mortality and morbidity was significantly reduced (RR=0.66; 95% CI, 0.52–0.83). Among the very elderly, the number needed to treat (NNT) to prevent 1 stroke over 2.2 years was 56. Adverse events resulting in withdrawal of medication was increased with active treatment over placebo (RR=1.71; 95% CI, 1.45–2.00). These results suggest some benefit in treating hypertension in the very elderly with just modest reduction of blood pressure from baseline.

The Hypertension in the Very Elderly Trial (HYVET) was one of the important large trials included in the Cochrane review. It was a randomized, double-blind, placebo-controlled multicenter trial that examined the treatment of hypertensive patients who