

Obesity Interventions for Patients With Diabetes: A Review

Context

Type 2 diabetes is a chronic disease characterized by high blood glucose that occurs when the pancreas does not produce enough insulin, or the body does not properly use the insulin that it makes. Excess body weight can contribute to the development of diabetes, and some antidiabetic medications can further increase body weight. In 2012, 14.7% of obese Canadians 18 years or older had diabetes compared with 5.1% of those who were not obese. The benefits of weight loss in overweight or obese patients with type 2 diabetes include enhanced glycemic control, improved mobility, and a decreased need for some medications.

Technology

Treatments for obesity decrease caloric intake or increase energy expenditure. Strategies for weight loss in obese patients with type 2 diabetes include lifestyle interventions such as dietary adjustment and increased physical activity, as well as pharmacological interventions. An initial weight loss goal of 5% to 7% of body weight is realistic for many patients with diabetes.

Issue

Given the importance of weight loss in potentially halting or slowing the progression of type 2 diabetes, a review of the clinical effectiveness of long-term obesity management interventions in primary care will help to guide decisions about how best to approach weight loss in patients with type 2 diabetes.

Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria.

Key Messages

For weight loss in obese and overweight patients with type 2 diabetes:

- Decreasing caloric intake results in greater short-term (six months) weight loss than increasing physical activity.
- A combination of diet and exercise are necessary to achieve and maintain weight loss in the long term (12 months or more).
- More patients using drug interventions achieve weight reductions of 5% or more than patients following lifestyle interventions.
- Weight loss is linked to better glycemic control, improved quality of life, reduced mobility loss, reduced or discontinued antidiabetes medications, and decreased mortality.

Results

The literature search identified 461 citations, 25 of which were deemed potentially relevant. An additional 10 reports were identified from other sources. Of these 35 reports, 10 met the criteria for inclusion in this review: 5 unique randomized controlled trials (RCTs), and 5 additional articles conducting secondary analysis of the unique RCTs.

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