

Side effects of Ozempic and other anti-obesity drugs

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The growing use of anti-obesity agents like Ozempic has revealed the existence of sometimes serious side effects associated with the use of these medications.

One class of drugs is currently receiving a lot of attention for its never-before-seen effects on weight loss. These drugs, in particular semaglutide (Ozempic, Wegovy) and tirzepatide (Mounjaro, Zepbound), are agonists (activators) of certain receptors involved in the control of blood glucose levels and it is for this reason that they have initially been developed for the treatment of type 2 diabetes.

During clinical trials of these drugs, however, it was observed that they also caused very significant weight losses in obese patients, which could reach 15 to 20% of initial body weight. This involves considerable weight loss: for example, for an obese person weighing 100 kg, this corresponds to 15-20 kg, i.e. of the same order as what bariatric surgery allows, which is sufficient to considerably reduce the risk of several complications associated with obesity.

For example, it was recently shown that weight losses induced by semaglutide significantly improved the clinical condition of patients with heart failure problems (1) and were also associated with a reduction in cardiovascular events in obese people with a history of coronary heart disease (2).

NOT ALL IS ROSY

As with any drug, the benefits provided by these new generation anti-obesity molecules are counterbalanced by a certain number of side effects. The most common ones affect the gastrointestinal system: nausea, vomiting, constipation, and diarrhea affect a significant proportion of patients and can lead in some cases to the outright abandonment of treatment.

More recently, we have noticed an increase in the incidence of certain rarer, but much more serious, side effects. For example, one study showed that treatment with this class of drugs increases the risk of pancreatitis by 10 times and by 4 times the risk of intestinal obstruction and gastroparesis (slowing or stopping the transport of food from the stomach towards the intestines) (3). The absolute risk of these complications remains low, but with the growing number of people being treated with these drugs (in the United States, 10 million prescriptions are reported in the last quarter of 2022 alone), even relatively rare side effects are now occurring in a large number of individuals.

It should also be mentioned that cases of depression and suicidal ideation have been reported in patients treated with this class of drugs, a phenomenon that had been observed with another anti-obesity drug (rimonabant) and which led to its withdrawal from the market.



PREVENTION, THE BEST APPROACH

As is always the case for all diseases linked to our lifestyle, the real solution to the obesity epidemic lies much more in prevention than in treatment. The key lies in eating habits: it is now well established that weight loss caused by these medications is directly caused by a loss of appetite, particularly for high-calorie foods.

Contrary to what we often hear, it is not the lack of activity which is responsible for the current epidemic of obesity, but rather the overconsumption of food, and it is therefore on the side of food supply that we must be particularly vigilant.

Behavioral surveys show that nutritional labeling on the front of the package to clearly identify products containing too much sugar, fat or salt, the taxation of sugary drinks to promote healthier alternatives or even the ban on advertising on the internet of ultra-processed foods aimed at young people are all valid options for improving eating habits and reducing the incidence of obesity.

- (1) Kosiborod MN et al. Semaglutide in patients with heart failure with preserved ejection fraction and obesity. *N. Engl. J. Med.* 2023; 389: 1069-1084.
- (2) Lincoff AM et al. Semaglutide and cardiovascular outcomes in obesity without diabetes. *N. Engl. J. Med.* 2023, Nov 11. doi: 10.1056/NEJMoa2307563. Epub ahead of print.
- (3) Sodhi M et al. Risk of gastrointestinal adverse events associated with Glucagon-Like Peptide-1 receptor agonists for weight loss. *JAMA* 2023; 330: 1795-1797.