



180 - HYPERRESPONSIVENESS TO INCRETIN THERAPY: AN INTEGRATIVE REVIEW OF PREDICTORS IN A CASE REPORT

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Resumen

Treatment with incretin drugs, such as semaglutide or tirzepatide, has transformed the approach to type 2 diabetes (T2D) and overweight/obesity, enabling not only metabolic control but also sustained remission and significant weight loss in certain individuals. We present an integrative review of hyperresponse to incretin therapy, based on a clinical case of a patient with hyperresponse to treatment with GLP-1 receptor agonists (arGLP-1). The patient was a 47-year-old male with T2DM, hypertension and grade I obesity (HbA_{1c} 8.7%, BMI 33.7 kg/m²) treated with semaglutide (1 mg/week) and metformin 850 mg/day for 2 years (good adherence), who achieved complete remission of T2DM at 6 months (HbA_{1c} 5.3%) and maintained it at 2 years (HbA_{1c} 5.7%), even after discontinuing antidiabetic treatment. Weight loss was 21% (-20 kg), with an estimated 25 cm reduction in waist circumference. Blood pressure normalised (118/80 mmHg) and an improvement in the lipid profile and TyG index, as a marker of insulin resistance, was observed. According to the literature, patients with higher baseline HbA_{1c} are associated with better glycaemic control. Conversely, factors associated with greater weight loss are: greater weight loss, absence of insulin treatment, female sex, a high TyG index, higher baseline weight, and duration of treatment. This case highlights the potential of incretin therapy as a disease-modifying treatment for metabolic disease in people with obesity and T2DM, achieving sustained remission and significant improvements in cardiometabolic parameters. The remarkable metabolic and weight hyperresponsiveness of this male patient with T2DM challenges some traditional prognostic patterns and highlights the multifactorial complexity of the response. The identification of clinical and biochemical biomarkers that can predict optimal response is critical to optimising the use of incretin therapy.