

## LIRAGLUTIDE AND INSULIN DETEMIR IN COMBINATION - A NEW THERAPEUTIC OPTION IN PATIENTS WITH TYPE 2 DIABETES: A CASE REPORT

*Milena Velojić-Golubović<sup>1,2</sup>*

<sup>1</sup>University of Niš Faculty of Medicine, Niš, Serbia

<sup>2</sup>Clinic of Endocrinology, Clinical Center Niš, Niš, Serbia

*Contact:* Milena Velojić-Golubović  
Sinđelićev trg 28/8. 18000 Niš, Serbia  
E-mail: milenavg@yahoo.com

A recently available new class of type 2 diabetes drugs – glucagon-like peptide-1 receptor agonists (GLP-1 RA) – has opened new possibilities in diabetes treatment. The most recent guidelines for type 2 diabetes management have clearly positioned this therapeutic option to be used very early in the course of diabetes (after the failure of metformin), but also as an efficient addition to insulin therapy.

We are presenting the case of a type 2 diabetes patient, who did not achieve glycaemic targets despite multiple changes in therapeutic approach. Intensification of diabetes therapy caused in this patient significant weight gain and a higher risk for hypoglycaemic events. At the baseline of our follow up, the therapy with biphasic insulin aspart was switched to basal insulin analogue insulin detemir, in combination with liraglutide (GLP-1 RA) added to metformin. In the first five months of follow-up, the patient achieved significant reduction of HbA1c (9.8% to 6.0%), average daily glycaemia (12.05 mmol/l to 7.1 mmol/l) and frequency of hypoglycaemic events. This combination also caused a significant weight loss (100 kg to 90 kg) and reduction in waist circumference (120 cm to 116 cm), with additional lowering and stabilization of blood pressure. The values reached remained stable throughout the whole year after starting this new drug combination.

From this case report we may conclude that the combination of liraglutide and insulin detemir presents a long-term, very effective, and safe therapeutic option for overweight type 2 diabetic patients.

*Acta Medica Medianae 2017;56(4):132-137.*

**Key words:** *diabetes type 2, obesity, liraglutide, insulin detemir*