



FOUR YEARS BASAL BOLUS THERAPY IN PEDIATRIC PATIENTS WITH TYPE 1 DIABETES MELLITUS

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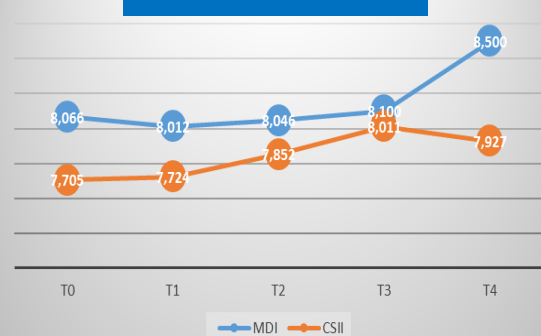
Introduction

Basal-bolus insulin therapy simulates physiological pancreatic secretion of the hormone. The aim of this study is to analyze the effects of a four year basal-bolus insulin therapy in T1DM pediatric patients treated by insulin pump (CSII group) or multiple daily injection therapy (MDI group: 3 injections of rapid/analogue insulin as bolus, glargine at bed-time as basal)

Materials and Methods

82 T1DM patients (M 40, age $10,5 \pm 3,7$ years, 41 CSII-group) were enrolled in the study and followed by the Pediatric Diabetes Center of University of Naples "Federico II". Patients with T1DM onset <1 year have been excluded. Glycated hemoglobin (HbA1c%), Body Mass Index (BMI) z-score, Units/Kg/day of insulin administered as basal and Units/Kg/day of insulin administered as bolus were evaluated at the beginning of the study and after 1, 2, 3 and 4 years of the same therapy.

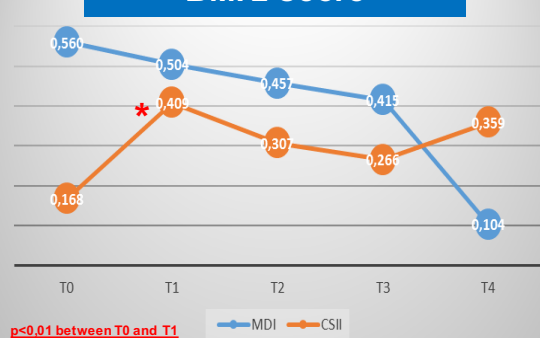
HbA1c



Conclusions

Using of CSII-long term therapy does not seem to have any advantages compared to MDI therapy.

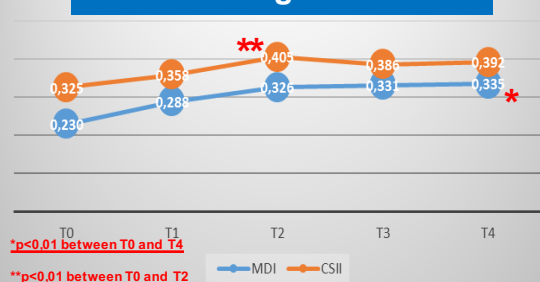
BMI z-score



Results

Mean HbA1c% value was stable in both groups; mean BMI z-score increased during follow-up in CSII group and decreased in MDI group; Units/Kg/day of basal insulin showed statistically significant increase in MDI-group; while only during the first two years of follow-up in CSII-group; Units/Kg/day of bolus insulin remained stable in both groups.

Basal insulin U/Kg/die



Bolus insulin U/Kg/die

