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THE IMPACT OF THE REHABILITATION METHODS IN CHILDREN WITH TYPE 1 DIABETES MELLITUS - AN UPDATE

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Introduction

In children with Type 1 diabetes mellitus (T1DM) is necessary to implement prevention and treatment measures, aimed to reduce the risk of premature morbidity and mortality.

Purpose

To evaluate the impact of rehabilitation methods of children with T1DM.

Material and methods

The study was conducted between 22.07.2019 and 08.08.2019, on 34 children (21 boys, 13 girls), age range 3-15 years. Evaluated medical records (average of pre- and postprandial glucose, daily summary insulin dose, etc.). Treatment (aero-helio-thalassotherapy, sludge applications, laser therapy, massage, aeroion therapy, inhalations, alkaline mineral water) within the "Sergheevca" Children's Rehabilitation Center. Training in a cycle of lessons - "School of Diabetes". Food - according to physiological needs, with carbohydrate calculation. Performed at least 5 daily glucose with adjusting insulin doses (Glargine, Detemir, Aspart, Glulisin).

Results

The total daily insulin dose (units/kg, see Fig.1) decreased by 18% in pediatric subjects with diabetes > 5 years (0.87→0.71) and 8% in those with < 5 years (0.62→0.57) ((girls - 4% (0.63→ 0.61), boys - 20% (0.60→0.48) aged > 10 years, and under 10 years - 2% (0.85→) vs. - 9.7% (0.82→0.74)). In children > 10 years old there was a0.83 decrease of 13%, and in those under 10 years - 7%.

The average blood glucose/24h, in children with diabetes > 5 years decreased by 5.6% (9.37→8.84 mmol/l), and in those with duration < 5 years - absent, and in the participants under 10 years a decrease of 8.5 % was noted (9.47→8.67 mmol/l), and in those over 10 years – absent

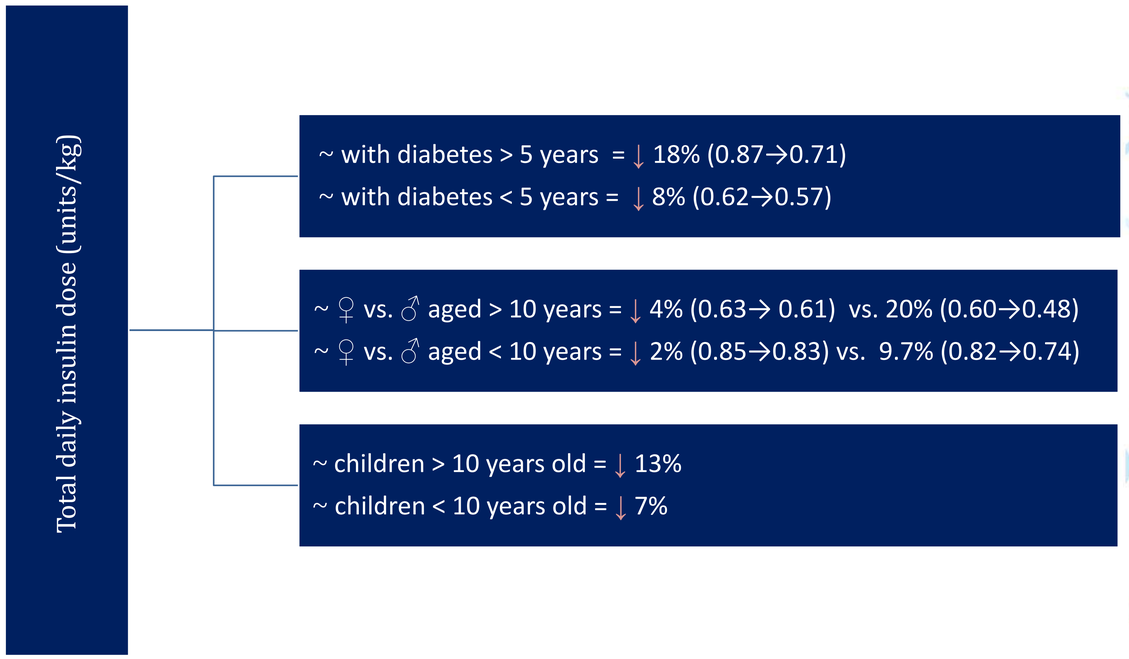

Figure 1. **The total daily insulin dose (units/kg) in children with diabetes**

Conclusions

The rehabilitation methods have a positive **impact for children with T1DM, expressed by a reduction of the total daily dose of insulin according to age, gender and duration of the disease.**

Keywords

Type 1 diabetes mellitus , rehabilitation.