

IMPROVEMENT OF METABOLIC CONTROL IN CHILDREN WITH TYPE1 DIABETES USING CONTINUOUS GLUCOSE MONITORING DEVICES

ESTELA GIL-POCH; MARÍA ROCO-ROSA; FRANCISCO JAVIER ARROYO-DÍEZ
Department of Pediatrics, Badajoz University Hospital, Badajoz, Spain.

INTRODUCTION AND OBJETIVES

Despite the new profiles of insulins and therapies with continuous infusion, hypoglycemia continue to be the most important barrier that prevents us from correctly controlling these patients.

Close control of capillary glycaemia is important for treatment adjustment. This self-control provides us with static information about capillary glycemia at a specific time, and multiple daily controls are necessary to know the patient's glycemic profile.

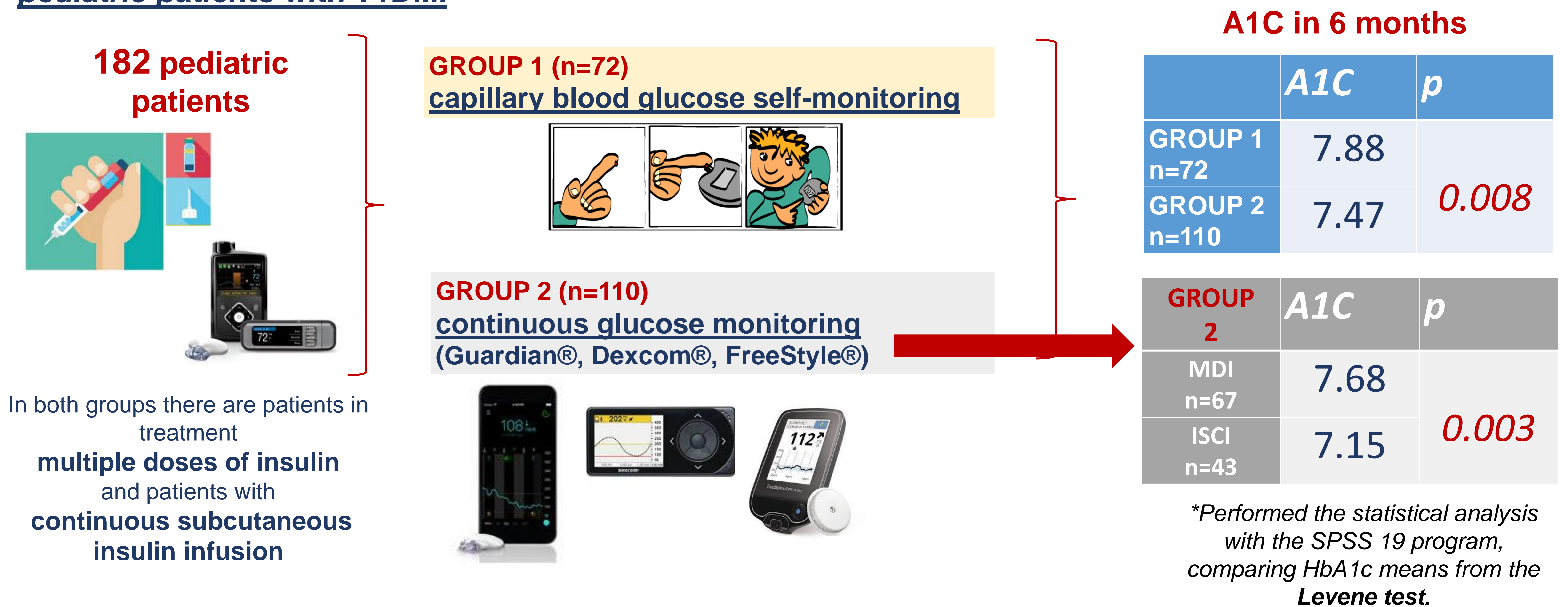
It is demonstrated that the greater number of capillary controls there is an improvement in HbA1c.

Some technologies have been developed, and provide us information in real time of the patient's glycemic profile, using interstitial glycemia data, which, in times of stability, can be equivalent to capillary blood glucose values.

They also provide personalized alarms for each patient, allowing them to make quick decisions, they also can reduce the number of hypoglycemia and increase the degree of involvement of the patient in their day to day.

MATERIAL AND METHODS

Study of the effect on metabolic control (A1C) using continuous glucose monitoring devices in pediatric patients with T1DM.



The average A1C is studied in a group of patients with continuous glucose monitoring (CGM) (n = 110) and compared with the average A1C in the group of patients without monitoring (n = 72) and as a result, there is a significant HbA1c lower in the group of patients with monitoring (7.47 vs 7.88, p <0.05)

In addition, among patients with monitoring, A1C is lower in patients who use continuous subcutaneous insulin infusion (7.15 vs 7.68, p <0.05)

CONCLUSIONS

In our group of patients we can see that the use of continuous glucose monitoring improves the metabolic control in pediatric patients, and this control is optimized when we associate a continuous glucose monitoring device with an infusion system of subcutaneous insulin.

