

USE OF FLASH GLUCOSE MONITORING FOR NON ADJUNCTIVE USE IN TYPE DIABETIC SUBJECTS USING CARBO COUNTING TECHNIQUE



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Background and AIM

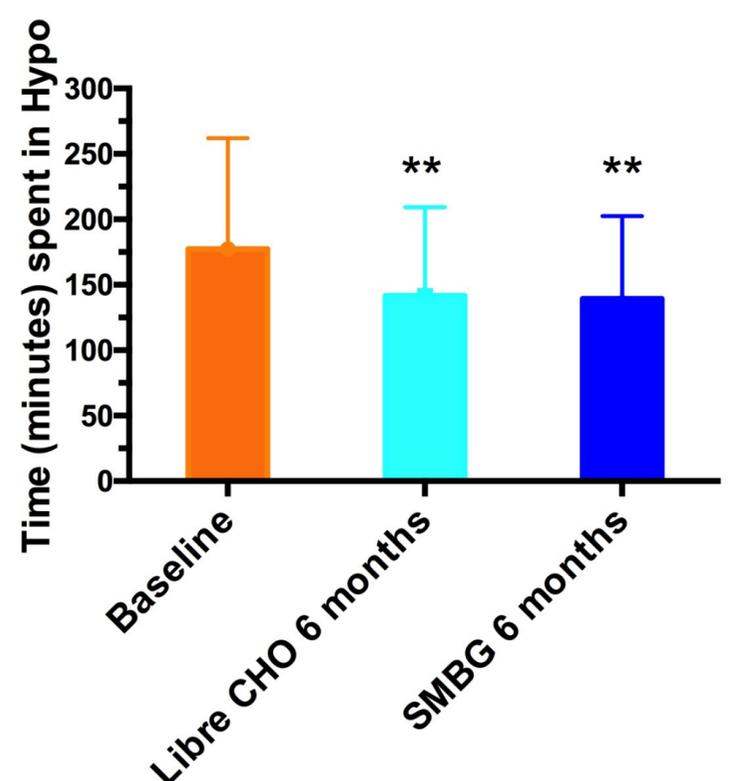
Over the past 5 years, there has been substantial improvement in glucose monitoring and its nonadjunctive use. An accurate relationship between glucose values detected by a flash glucose monitoring system it is pivotal since it allows type 1 DM subjects, using carbo counting technique, to determine the right insulin dose at meals

Materials and Methods

We evaluated nonadjunctive insulin dosing in 28 Type 1 Diabetes subjects (T1DM), on carbo-counting willing to use Libre flash monitoring system for 6 months. They measured 14 days before each visit, pre-meal glucose values with finger-stick and Libre at the same time. Fourteen subjects were asked to take therapeutic decisions after scan results if pre-meal glucose value 80-250 mg/dl and trend arrow not rapidly upward or downward. For statistical analysis we used ANOVA for repeated measures

Results

Population age was (M±SD) 38 ± 8,7, diabetes duration 15,3 ± 9,06.. There was any difference regarding HbA1c and number of hypoglycemic events, Time spent in hypoglycemia was reduced in all Libre users after six months (177,1 ± 84,62 min vs 141,7 ± 67,7 min p< 0.0001) with an additional little effect in finger-sticking subjects (139.1 ± 63,2 p<0.0001). In Libre users variability < 10th percentile was reduced at 6 months (p=0.028) but not in subjects on carbo counting based on SMBG. Post meal glucose area under the curve was not significantly lower in those who used finger-stick test.



Conclusion

In our real world experience T1DM subjects using Libre flash monitoring system were able to rely on results of their scans for carbo-counting, for management of hypoglycemic events and for insulin dosing. We need more information on Libre use at the outer boundaries of glucose values (glucose values <80 mg/dl pre-meal or >250 mg/dl rapidly changing).