Clinical changes observed after the implementation of 0.5 UI dosage systems in children with DM1a

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INTRODUCTION:
Several drugs and pharmaceutical formulations are not sold in our country because of different reasons: economic, market requirements or the prevalence of the disease. Children with DM may be deprived of pharmaceutical presentations for them because of the low prevalence versus the number of adult patients with DM 2.
One of the problem that young children with DM1 have is the high sensitivity to insulin.
Since May 2014 marketing begins in Spain vials for JUNIORSTAR system that allows the administration of glargine and glisulide in pens 0.5UI

OBJECTIVE:
To evaluate the impact of using insulin vials for JUNIORSTAR device 0.5/0.5UI in young children with DM1 and compare it with our previous experience and published Rev Esp Pediatr Endocrinol 2013; 4 (Suppl) device imported from abroad

MATERIAL & METHODS:
DM1 children over 2 years with at least 6 months duration from debut. Age> 2a. Sensitivity index> 100mGrs / dl / IU. Desire of parents to not use syringes. Rejection Insulflow® type devices. No possibility ISC. Using glisulide insulin and/or insulin glargine and comparison with the data (Farmaco Foreign Ministry authorization code 011813) RAPID NOVO PenFfill CARTUCHOS®.
Study comparative IBM Statistisc SPSS 19.0., Nonparametric paired samples n <30. Health Survey Questionnaire SF-36 (Spanish and summarized).

RESULTS:
10 children (5:5), mean age 5.8 to [5-8.5].
Prior HbA1c (DCA): 8.1% [6.4-8.8] needs: 0.72 IU / kg / day [0.45 to 0.88], sensitivity 168 mgr / dl / UI [135-280] and Survey 7.2 points [6-8] .
After 6 months of use HbA1c (DCA): 7.5% [6.8-7.9] p: 0.38, needs 0.88 IU / kg / day [0.77-1.05] p differences: 0.01 95% CI [0.12 to 0.34], sensitivity 145 mgr / dl / UI [125-205] p: 0.001, and Ene 8.5 points [7-9].
Improvement score similar to previous study.

CONCLUSIONS:
The improve of the quality of life perceived by parents with this dosage form and the low cost of this action entails a best transition to adult-type devices.