Biochemical profiles differentials by SGA children catch up

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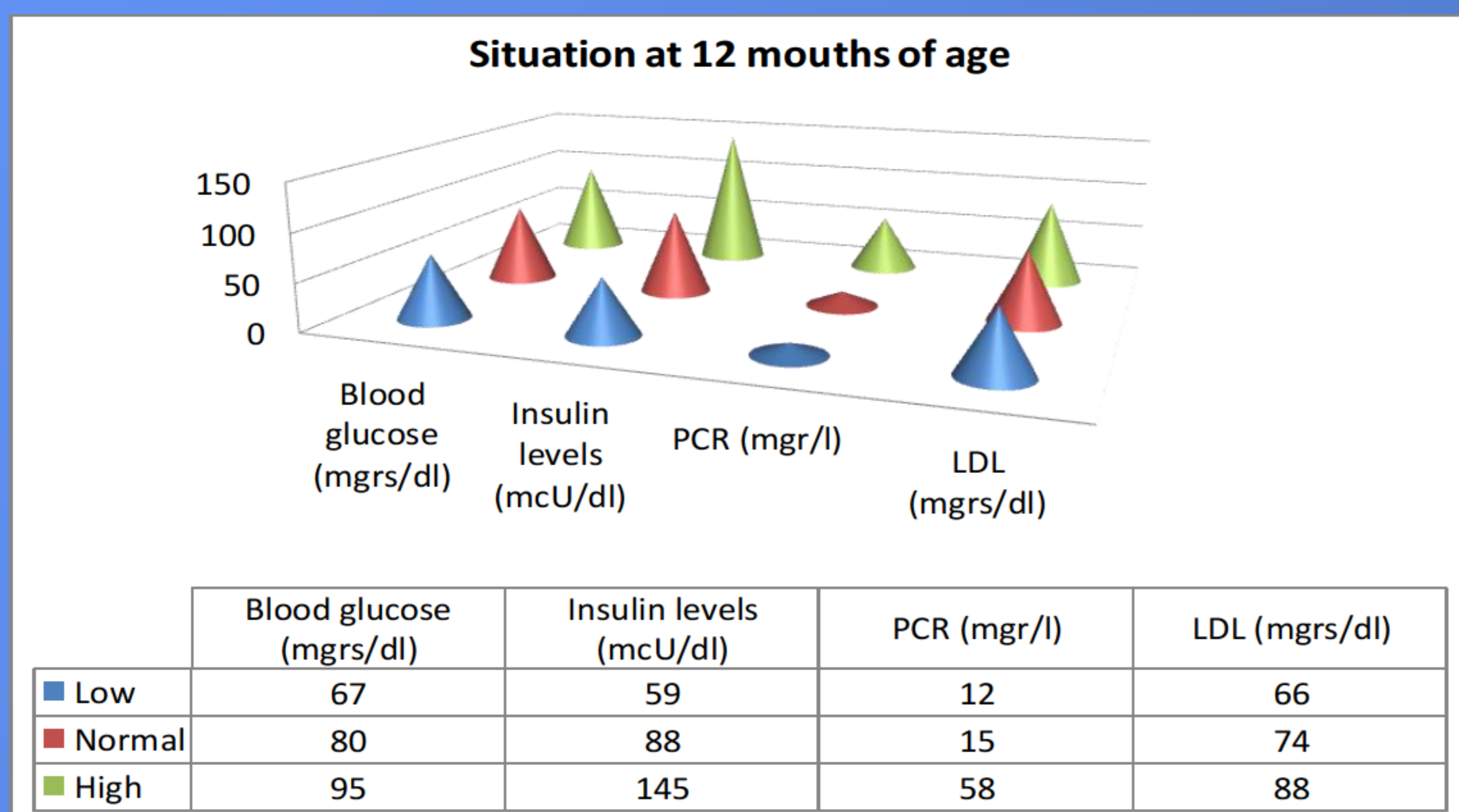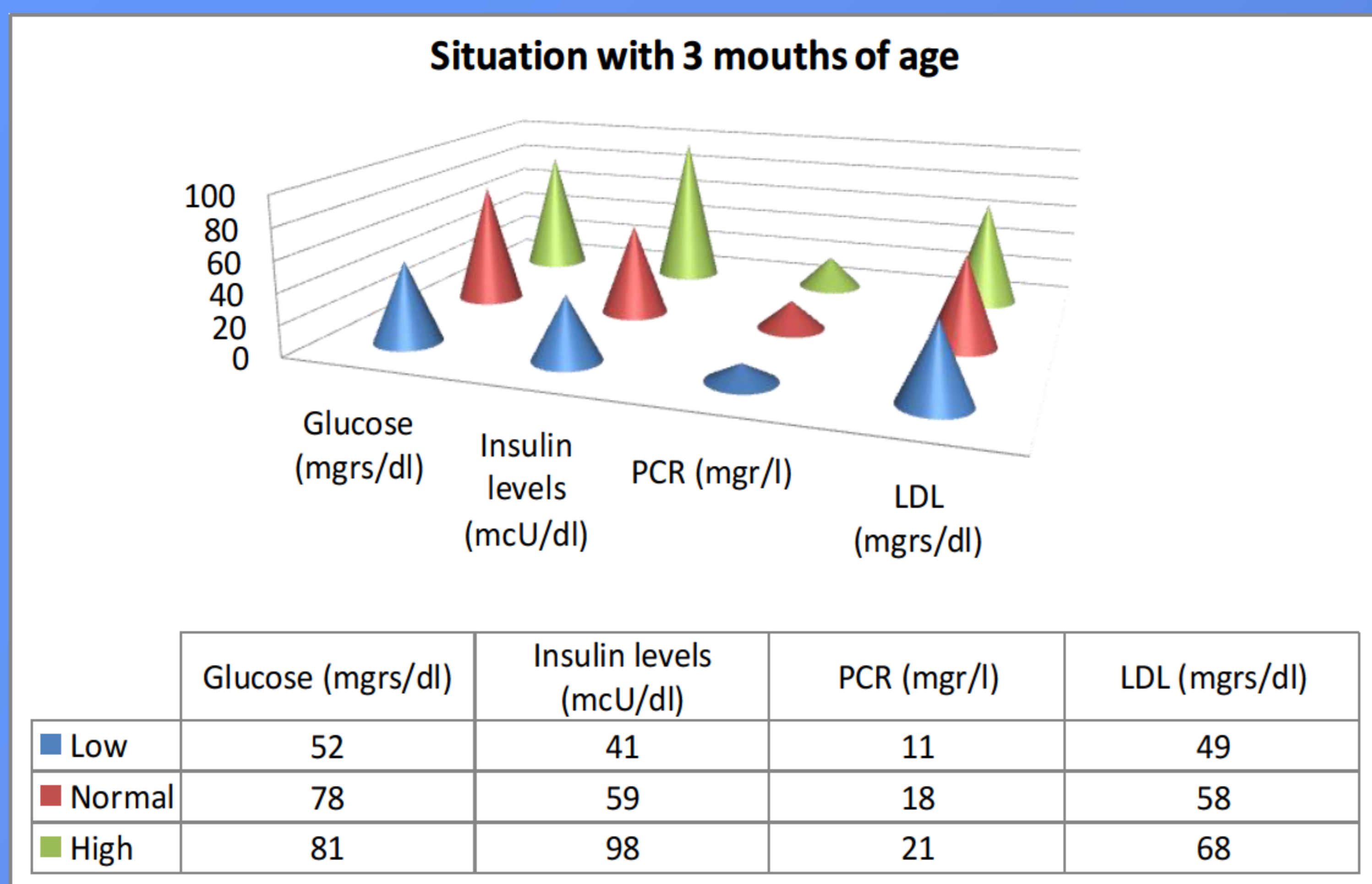*(2)Grupo Nutrición y Obesidad, Facultad de Farmacia, Universidad del País Vasco. Vitoria.*
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INTRODUCTION:

SGA spanish cohort study in analytical and metabolic variables at 3 and 12 months of age with somatométrica situation.

OBJECTIVE:

Study different is SGA children between catch up slow, normal or fast in the first year of life
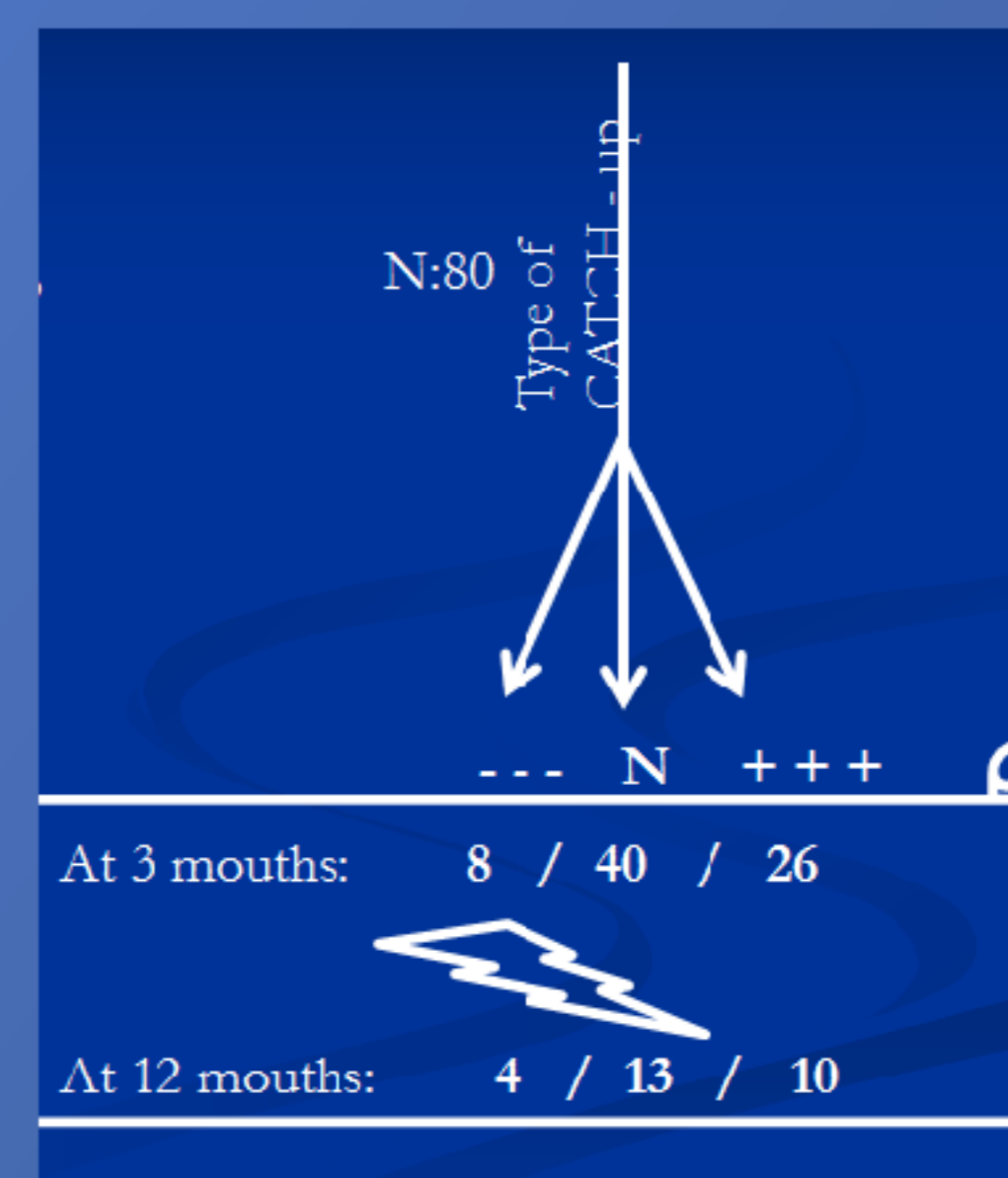
MATERIAL & METHODS:

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 Insuflow® type devices.
No possibility ISCI. Using glisulide insulin and / or insulin glargine and comparison with the data (Farmaco Foreign Ministry authorization code 011813) RAPID NOVO PenFill CARTUCHOS®.
Study comparativo.IBM Stastistics SPSS 19.0., Nonparametric paired samples n <30.
Health Survey Questionnaire SF-36 (Spanish and summarized).

Situation with 3 mouths of age

	Glucose (mgrs/dl)	Insulin levels (mcU/dl)	PCR (mgr/l)	LDL (mgrs/dl)
Low	52	41	11	49
Normal	78	59	18	58
High	81	98	21	68

Situation at 12 mouths of age

	Blood glucose (mgrs/dl)	Insulin levels (mcU/dl)	PCR (mgr/l)	LDL (mgrs/dl)
Low	67	59	12	66
Normal	80	88	15	74
High	95	145	58	88

N:80
Type of Catch up

--- N +++

| At 3 mouths: | 8 / 40 / 26 |
| At 12 mouths: | 4 / 13 / 10 |

RESULTS:

10 children (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 Enc 8.5 points [7-9].

Improvement score similar to previous study.

RESULTS

Age/study Media (SDS)	NORMAL catch-up	Low Catch up	High Catch up	Signification
Age os study	3 mouth	3 mouth	3 mouth	3 mouth
Glucose (mgrs/dl)	72 (8)	58 (6)	81 (5)	0.01
Insulin (mCU/ml)	6 (1)	4 (2)	10 (3)	0.03
PCR (mgrs/dl)	1.8 (0.5)	1.1 (0.3)	2.1 (0.6)	0.55
LDL (mgrs/dl)	58 (8)	49 (6)	68 (10)	0.04
IGF-1 (ng/ml) Total cases (45)	38 (3)	<25	46 (8)	0.01
Age os Study	12 mouth	12 mouth	12 mouth	12 mouth
Glucose (mgrs/dl)	80 (7)	67 (6)	95 (4)	0.001
Insulin (mCU/ml)	9 (2)	6 (2)	15 (4)	0.01
PCR (mgrs/dl)	1.5 (0.3)	1.2 (0.2)	5.8 (1.3)	0.005
LDL (mgrs/dl)	74 (8)	66 (5)	88 (8)	0.01
IGF-1 (ng/ml) Total cases (27)	88 (7)	35 (5)	124 (18)	0.0001

CONCLUSIONS:

Improving quality of life perceived by parents with the low cost of operation defines the potential of this dosage form as a transition to adult-type devices.

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