

The expression of cytokines in SGA children throughout lactation allows to characterize early the type of catch-up

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INTRODUCTION:

Up to 50% of children born PEG at 2 years have not made a correct catch up (by excess or defect), with repercussions on size, metabolic and cardiovascular alterations, DM, etc. The epiPEG-PreMeb Project has developed a prospective cohort of PEG children and seeks to study phenotypic, BQ and genetic differences that explain their different behavior

Material and methods:

We study live births of single pregnancies in our Hospital during 2012-2014, and are classified according to EG and weight / height (Spanish Tables 2010). N estimated: 110. Visits are made at 0, 3, 6, 9, 12, 15, 18 and 24 months, with measurements of weight, height and perimeters. Blood samples are obtained at times 3, 12 and 24

Results at the end of the initial selection: 103 PEG recruited in 24 months (♂56, 55%) Data of the children at birth: average weight -2.7 SD [-3,5-1,8], average size -2, 4 SD [-3,2-1,9], for sex and EG.

Exclusive breastfeeding: 77/103 (74%) during the 3rd month of life.

Differentiation is carried out according to spontaneous catheter type with assessment at 12 and 24 months. Comparative variables P / T Δ +/- 0.5 SDS vs. TE2010

Conclusions:

We characterized the behavior of cytokines during 24 months of the life of the PEG child, with significant changes in NOV, Imentin, Adiponectin and leptin. It has also been allowed to characterize that compared to the CONTROL group (normal cathup), there are differences in the different variables, which would allow defining the evolution of a PEG from 3 months

	Catch-up slow (n=11)	Catch-up normal (n=9)	Catch-up quickly (n=7)
Leptina (ng/mL)	3,41 (1,15) ^{§§}	5,77 (2,69)	4,52 (3,19)
Adiponectina (µg/mL)	81,96 (42,27) [†]	56,61 (36,78)	31,51 (13,62)
Omentina (ng/mL)	434,98 (117,37) ^{§§,††}	312,80 (113,81)	305,95 (81,77)
Chemerina (ng/mL)	207,78 (35,46) ^{§§}	191,00 (19,68)	201,03 (22,06)
Vaspina (ng/mL)	0,14 (0,07) [§]	0,20 (0,10)	0,17 (0,07)
NOV (ng/mL)	141,77 (45,70) [†]	114,93 (18,54)	91,11 (20,06)

	3 months (n=27)	1 year (n=21)	2 years (n=18)
Leptina (ng/mL)	4,47 (2,40) ^{##, ††}	3,39 (1,60)	3,09 (1,87)
Adiponectina (µg/mL)	61,12 (39,21)	54,65 (28,10)	75,00 (57,87)
Omentina (ng/mL)	363,13 (119,94) ^{##, ††}	394,77 (102,43)	423,51 (116,01)
Chemerina (ng/mL)	205,38 (29,20)	201,95 (19,33)	192,58 (24,72)
Vaspina (ng/mL)	0,17 (0,08)	0,16 (0,07)	0,19 (0,08)
NOV (ng/mL)	120,17 (37,39) ^{##, †††}	88,03 (24,56)	73,15 (17,74)

