ANTHROPOMETRIC AND CLINICAL SITUATION IN TWO GROUPS OF YOUNG ADULTS BORN SMALL FOR GESTATIONAL AGE (A GROUP WITH CATCH-UP AND ANOTHER WITHOUT CATCH-UP AND TREATED WITH GROWTH HORMONE)

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INTRODUCTION

Children Small for Gestational Age (SGA) are known to have lower neurocognitive development and an increased cardiovascular risk in adulthood. 10% of SGA don´t usually do the catch-up and if they meet criteria they have indication to follow Growth Hormone (GH) treatment.

MATERIAL AND METHODS:

Data were collected from a sample of 61 adults born SGA (treated and not treated with GH). Informed consent was obtained by phone, as well as clinical-analytical data that were contrasted with the clinical history.

*Exclusion criteria: prematurity, multiple parity and syndromes

OBJECTIVES:

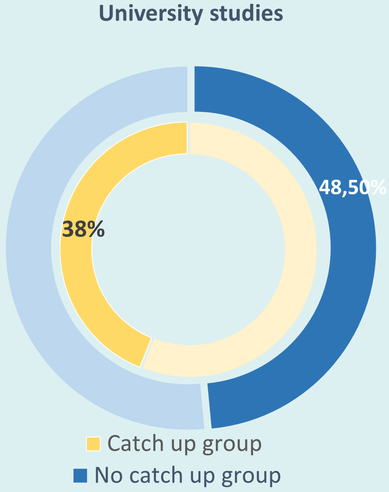
To establish the difference between SGA children who did or did not catch-up (treated with GH) in terms of:

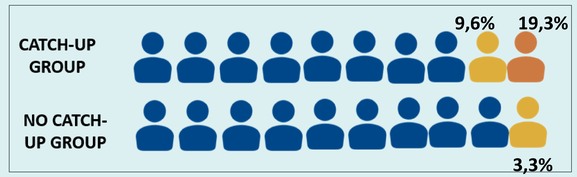
- Newborn anthropometry (weight at birth (WB) and Length at birth (LB)
- Final Height (FH) relative to their Target Height (TH): (FH-TH)
- Body Mass Index (BMI)
- Cardiovascular risk factors (Lipid profile; Carbohydrate metabolism; Blood pressure (BP))
- Academic level

RESULTS

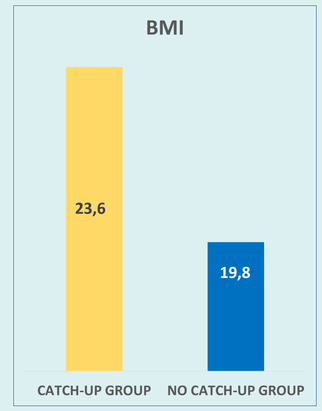
	CATCH-UP GROUP		NO CATCH-UP GROUP
	31 adults (15 female)		30 adults (15 female)
Age (years)	27,5 (23-32)		22,8 (18-30)
Newborn anthropometry (SDS)	WB: -3,0 [-4,5- (-1,6)]	T-Student -3,1, p<0,001 (IC -1,27 a -0,47).	WB: -2 [-3,8- (-0,4)]
	LB: -3,2,[-4,7-(-1,99]	T-Student -4,3 p<0,03, (IC -1,1 a -0,24).	LB: -2,37 [-5,55-(-1,9]

	CATCH-UP GROUP		ANALISIS	NO CATCH-UP GROUP	
Final height (cm)	♀ 160,8 (152-174)	♂ 169,7 (160-189)	T-Student (SDS) p<0,001 (IC 0,4-1,3)	♀ 153 (148-163,5)	♂ 167(160-170,5)
Final height-Target height (FH – TH) SDS	-0,31 SDS (-2,7- 1,54)		No signifcant differences	-0,57 SDS (-2,05-1)	
GH treatment	No			For 6,7 years (1,5-12,5)	





25% has abnormal lipid profile or abnormal BP in the No Catch-Up Group



BMI p<0,001

CONCLUSIONS

- Anthropometric data at birth (WB and LB) are lower in the catch up group whereas the final size is larger.
- Both groups reach similar academic levels
- There are no differences between the two groups in FH-TH.
- BMI is higher in those who did catch-up and they seem to present higher cardiovascular risk.