

Diabetes mellitus type 2 in Pediatrics : an emerging reality in our country. First described in Spain

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INTRODUCTION:

The diagnosis of increasingly serious in the early years of life obesity has experienced a large epidemiological increased worldwide in recent decades, and especially in our country and in some groups. Many of the metabolic complications (SM) and cardiovascular have their origins in childhood and are closely related to the presence of insulin resistance (IR) , which associated complications : hepatic steatosis , endothelial dysfunction , polycystic ovary syndrome (PCOS) dyslipidemia , prediabetes, type 2 diabetes , and asthma. To date there have been described in our type 2 DM in children associated with obesity

OBJETIVE:

To study within our cohort of obese children followed in the prevalence of IR Hospital and DMtipo2

MATERIAL and METHODS:

Retrospective cohort of obese children Consultation (2000-12) . BMI> P97 (Orbeago 2004). Making OGTT (ADA criteria) and criteria for Metabolic Syndrome IFD 2007 (MS) . IBM SPSS 18.0 statistical descriptive

RESULTS:

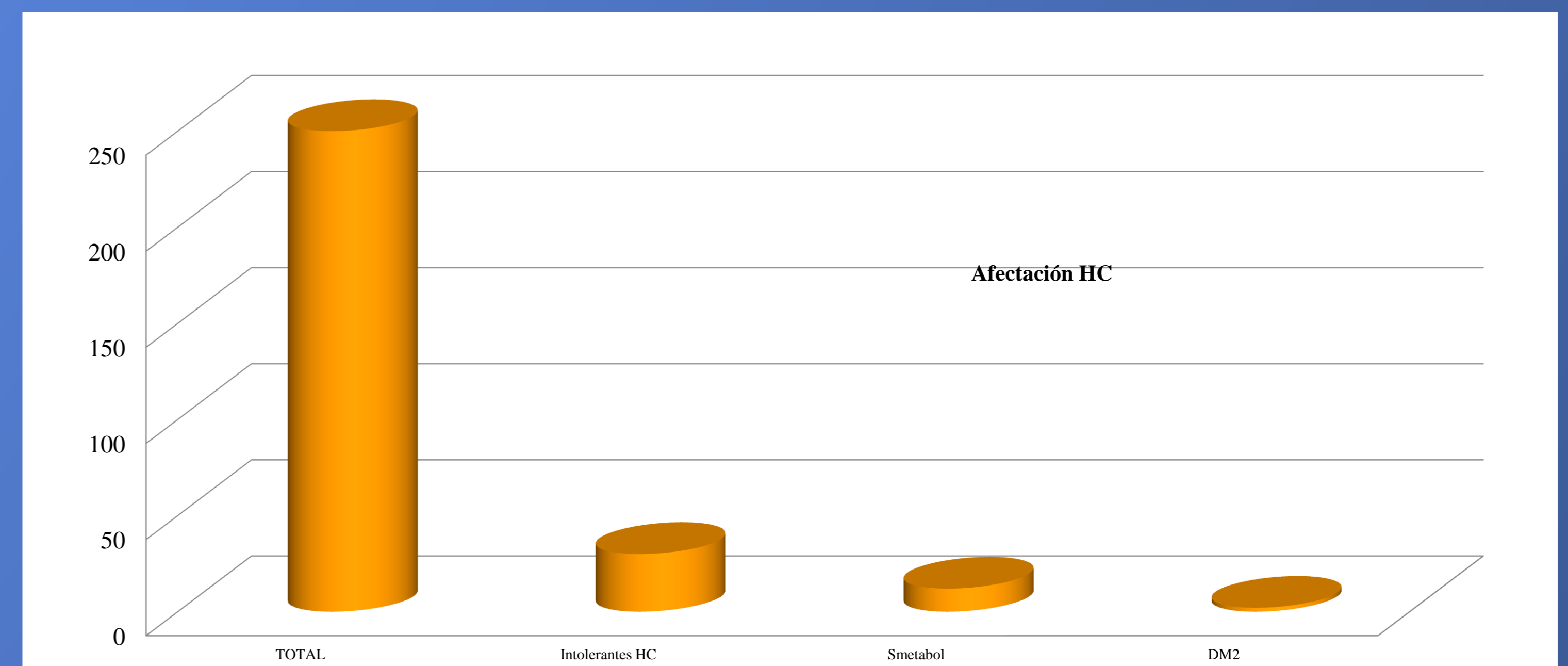
250 cases initially selected . 54 % (n = 135) 46 % girls (n = 115) children. First consultation Age : 10.1 ± 2.2 (6-17) . Weight and height at birth: 92 % PAEG , 2.7 % PEG , 5.4 % MEG . BMI (kg/m2) average Z -score +2.8 , with DS 0.75 [2-8.5] . Tanner I (61 %) T2-4 (35 %), T5 (4 %) . Obesity grade I (44 %), grade II (46 %), grade III (7%) severe / morbid (3%). Intolerant OGTT 30/250 (12 %) , criteria MS 12 /250 (5%) and DMtipo2 2/250 (0.8 %). Description cases

PREVALENCIA DE INTOLERANCIA A LA GLUCOSA EN NIÑOS OBESOS EN OTRAS POBLACIONES

ESTUDIO	Edad (años)	Etnia	IMC	INTOLERANCIA A LA GLUCOSA	DIABETES MELLITUS TIPO 2
ESTADOS UNIDOS Ranjana S NEJM 2002	4 a 10 n:55 11 a 18 n:112	Caucásica Afroamericana Hispánica	> P 95	21-25 %	4 %
ITALIA Invitti C Diabetes Care 2003	6 a 18 n:710	Caucásica europea	3,8 (0,7 DE)	4,5 %	0,14 %
TURQUIA Wiegand S Horm Res 2000	11,8 (2,8 DE) n:58	Caucásica Turca	> P 97	34 %	7 %

PREVALENCIA DE INTOLERANCIA A LA GLUCOSA EN NIÑOS OBESOS EN OTRAS POBLACIONES

ESTUDIO ESPAÑOLES	Edad (años)	Etnia	IMC	INTOLERANCIA A LA GLUCOSA	DIABETES MELLITUS TIPO 2
Aguayo 2005-9	6 a 14 n:136	Euskadi	> P 95	9.6 %	0 %
Yesta 1998-2003	4 a 18 n:145	Catalanes	>P95	19.2 %	0 %
Bahillo 2008	5 a 18 n:100	Castellanos (95%)	> P 95	15 %	0 %



CASE #1



- FA: DM2
- PA:SGA Disharmonious and X-fragil
- DEBUT: 12.9y. BMI +3.5 SDS
- Glucemia 980 mgrs/dl pH:6.9

Peptide C:1.2 ng/ml [0.7-4.0]

Insulin 34 mcU/ml [0-25]

Ac IAA GAD IA2 negatives

HbA1c: 11.8% HLA DR3/4 -/-

- Insulin: 2.8 ui/kg/d (glargina+lispro) + metformina → 16% lost weight → only metformina/act.



CASE #2

- FA: DM2 y SOPQ - DM gestacional
- PA: PEG Disharmonious
- DEBUT: 13.5y BMI +2.8 SDS
- Glucemia 460 mgrs/dl pH:7.3

Peptide C:2.2 ng/ml [0.7-4.0]

Insulin 29 mcU/ml [0-25]

Ac IAA GAD e IA2 negativos

HbA1c: 10.6%HLA DR 2/3/4 +--

- Insulin: 1.8 ui/kg/d (glargina+glisulide) + metformina → 8% lost weight → liruglatide ELLIPSE

CONCLUSIONS:

Childhood obesity in our country has reached such prevalence and intensity which gives rise to cases of type 2 DM , as described in other age groups and regions