

EPIDEMIOLOGICAL STUDY AND ANALYSIS OF TYPE 1 DIABETES COMPARING PATIENTS WITH AND WITHOUT KETOACIDOSIS IN THE LAST 5 YEARS.

Irene Pilar Fernandez Viseras (1), Maria Angeles Santos Mata (2), Silvia Ponce Delgado (2), Celia Morales Perez (2), Francisco José Mcías López (2)

Pediatric Endocrinology Department. Hospital Virgen del Camino. Sanlúcar de Barrameda. Spain
Paediatric Endocrinology Department. Hospital de Jerez. Jerez de la Frontera. Spain.



BACKGROUND

Type 1 diabetes (T1DM) in childhood is a highly prevalent disease, with incidence oscillating around 17.6/100000. However, incidence is higher in some communities (25.5/100000), as it is in the case that concerns us. Diabetic ketoacidosis (DKA) is a complication usually recorded in 25-40% of cases but has been as high as 55% in studies of children under 5 years old. (T1DM) is an associated autoimmune disease to other precursor autoimmune pathologies.

OBJECTIVE:

To compare the clinical, epidemiological and associated comorbidities in patients with type 1 DM. Establish differences between (DKA) with and without onset, as well as severity of said (DKA).

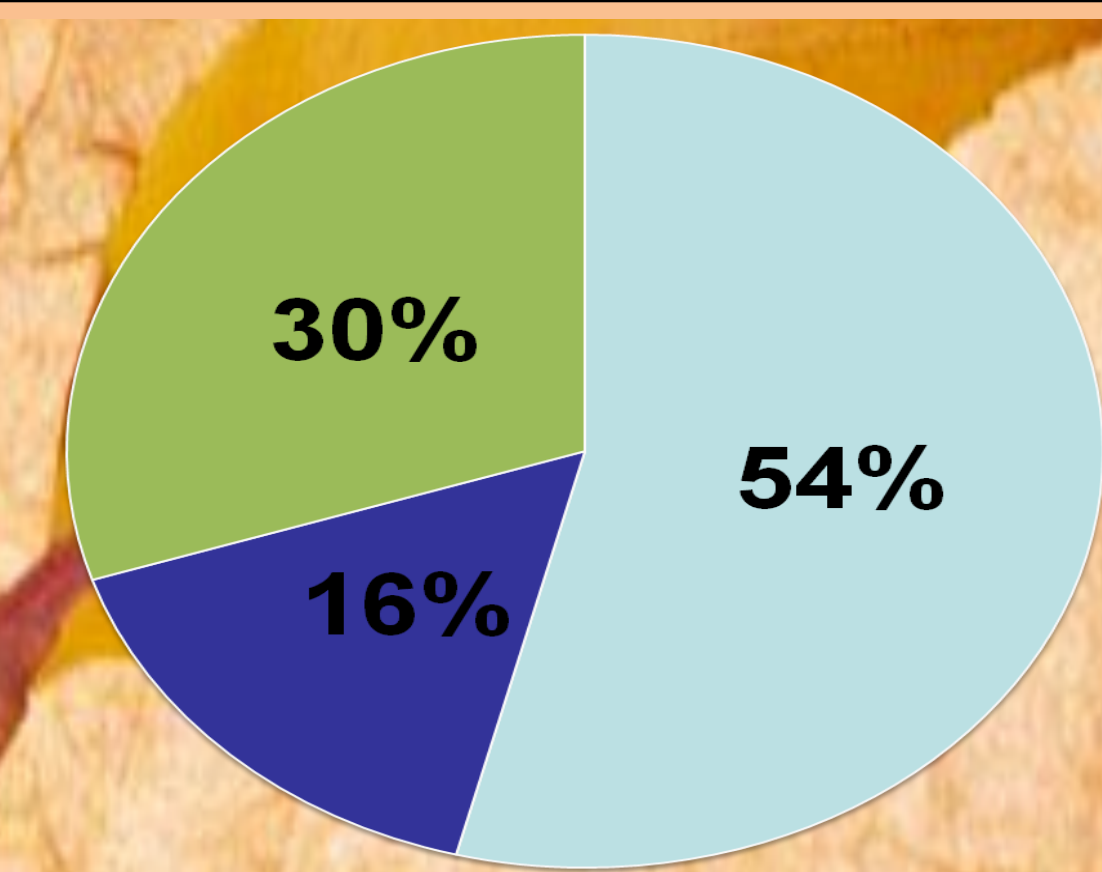
MATERIAL AND METHOD

Observational, descriptive and analytical retrospective study of patients diagnosed with (T1DM), between January 2013 and December 2017. The variables sex, age, HBA1c, Insulin, C-peptide, severity of DKA, place of origin, levels of 25-OH-Vitamin D, season, autoimmunity, breastfeeding, diseases associated with the onset, establishing two periods to compare 2013-2015, versus 2016-2017. We have stratified the DKA according to age groups: 0-5 years, 5-10 years, 10-14 in order to analyze if the incidence was higher in children under 5 years, as reflected in the literature. Data was analyzed through SSPS20.0

RESULTS

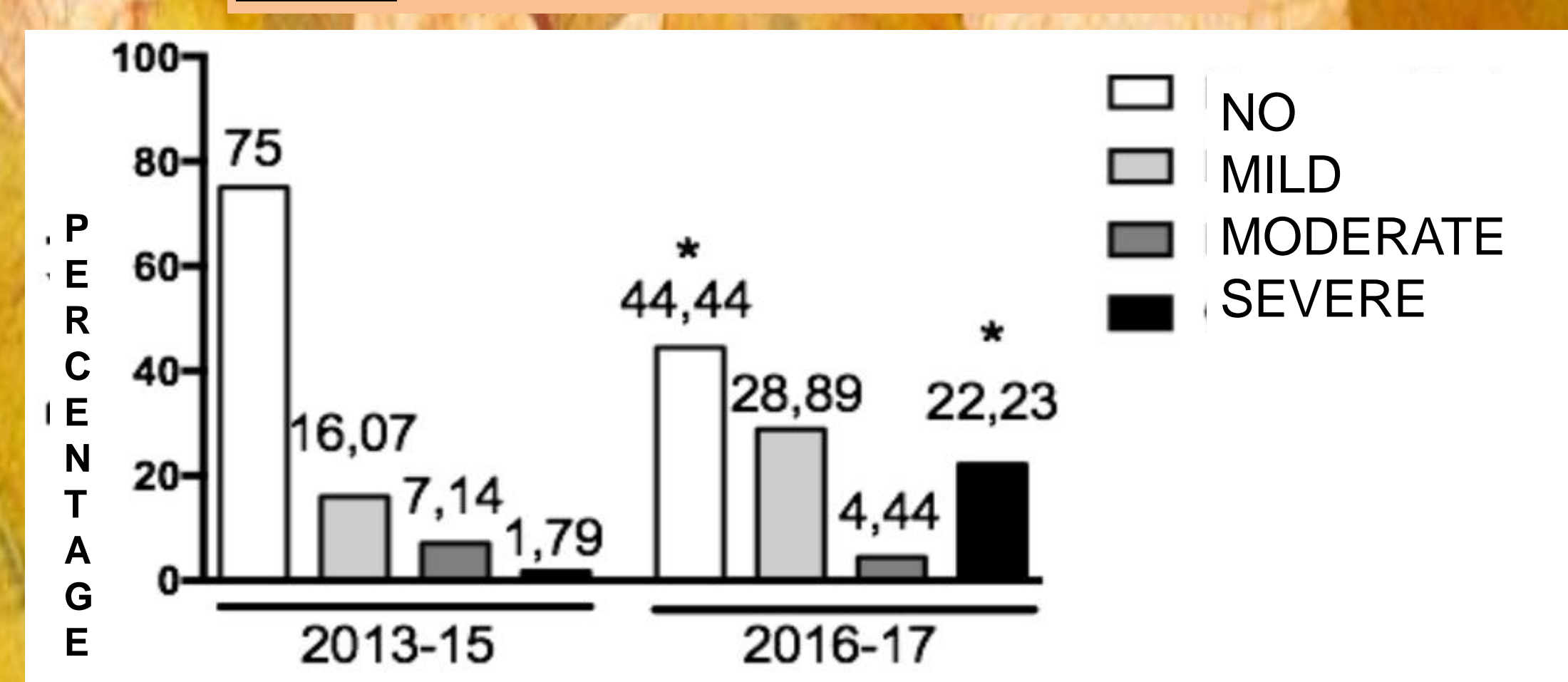
101 children were diagnosed, the population is parity with respect to sex (53.5%F vs 46.5% M). The mean age was 8.03 years, DKA (8.1 +/- 3.8) versus NO DKA (8.2 +/- 3.7). The average HBA1C was 10.98%, there were no significant difference between time periods, neither between patients with or without DKA. 70% of cases of severe DKA in 2016-2017 were older than 5 years.

Incidence KAD mild, moderate, severe



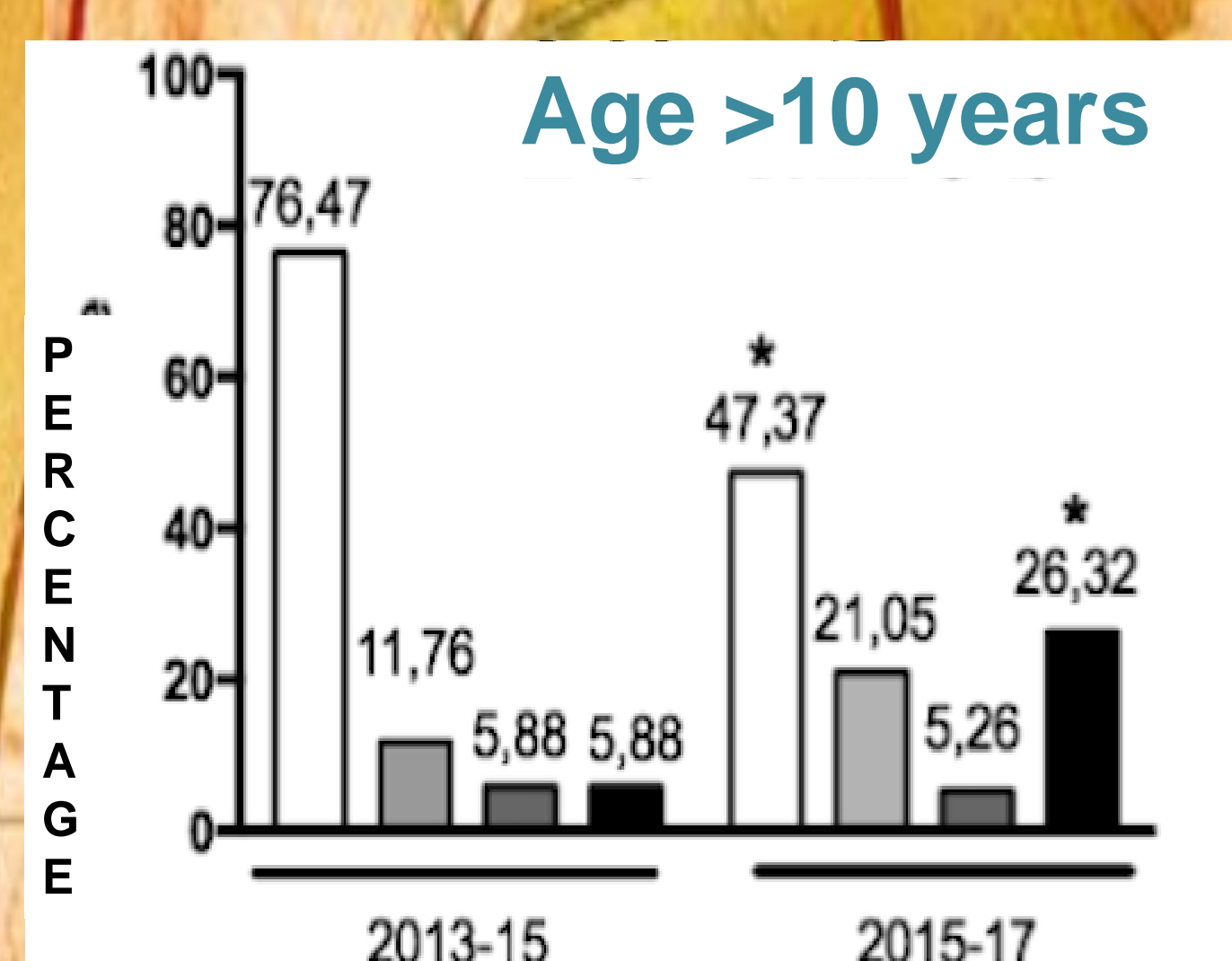
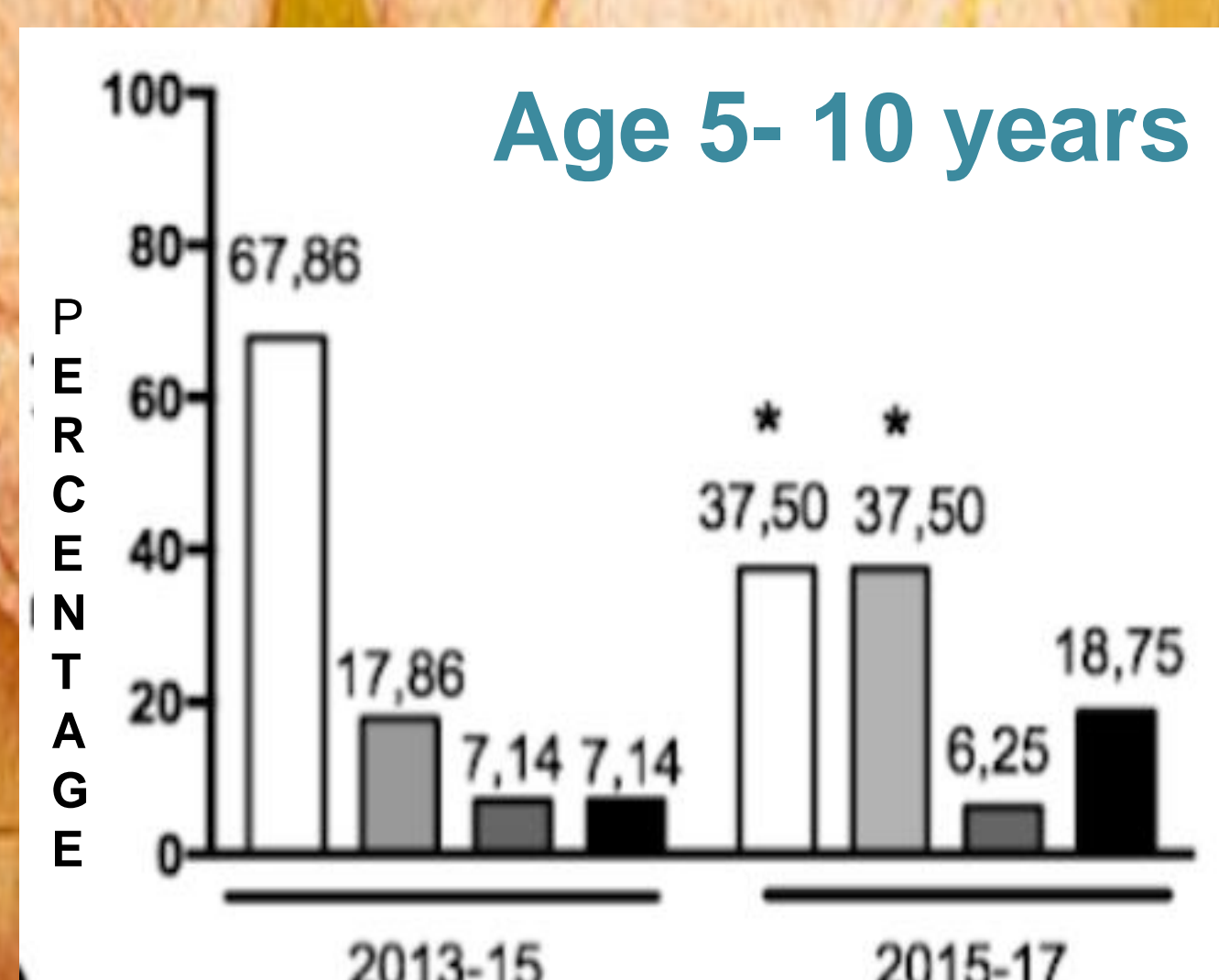
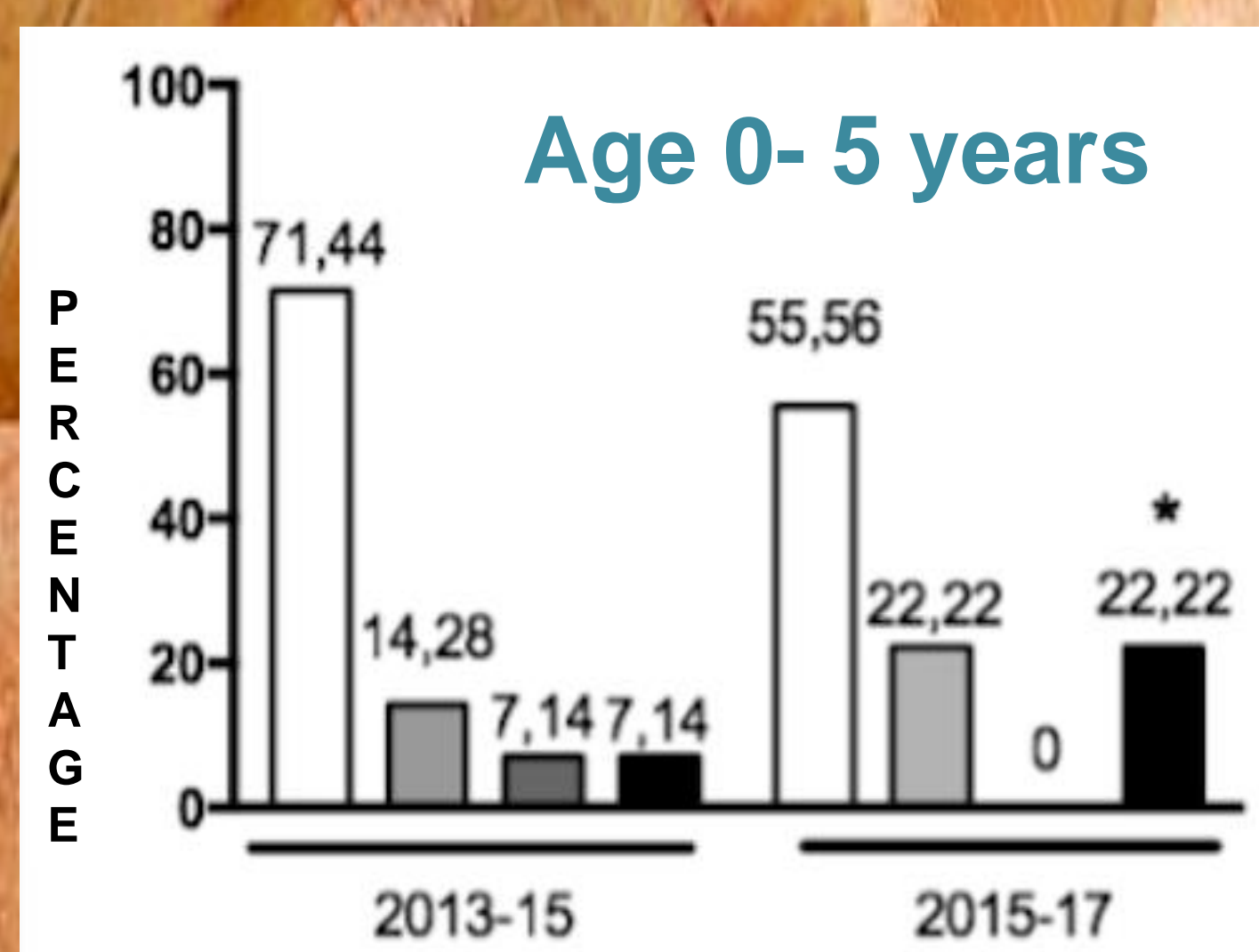
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Distribution incidence of KAD

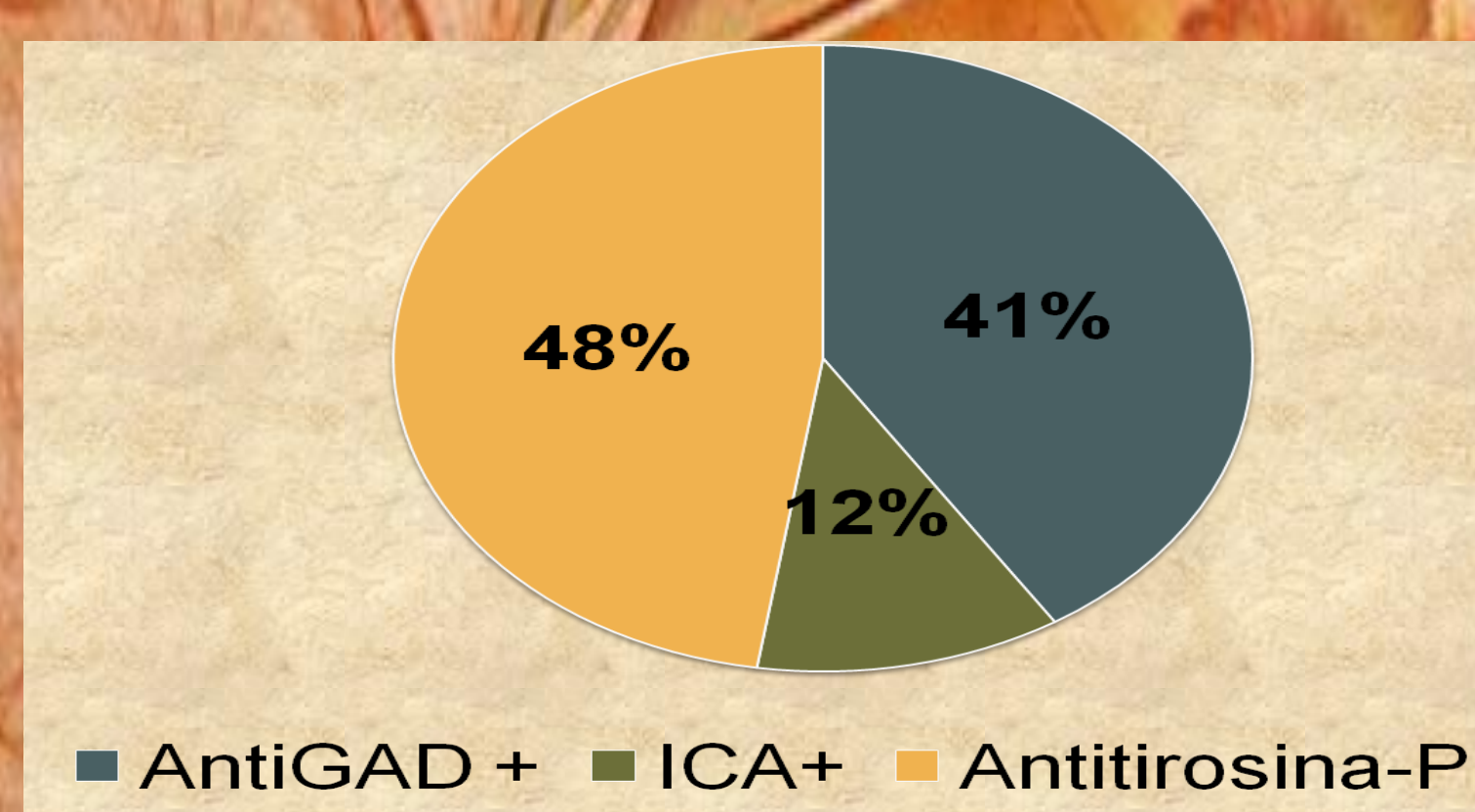
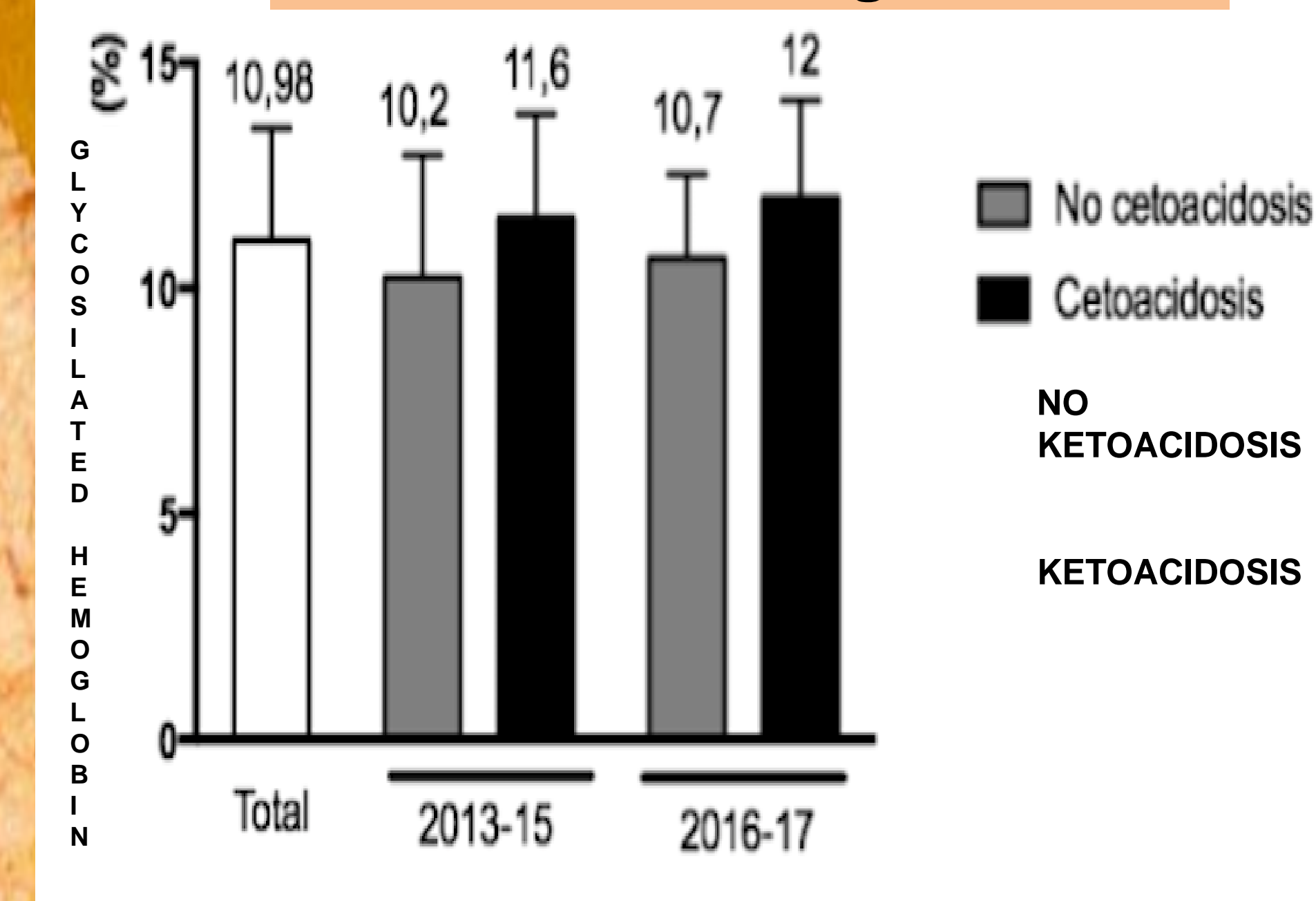


	2013-15	2016-2017	p		
	CAD(-)	CAD(+)	CAD(-)	CAD(+)	
HBA1c(%)	10,2	11,6	10,7	12	NS
Sex: Male%	76	24	74	45,5	
Female%	74,2	25,8	24,8	75,2	P<0,05
Insulin(mCU/ml)	2,85	2,07	2,27	1,7	NS
C-Peptide (ng/ml)	0,49	0,27	0,57	0,25	P<0,05
25OH VitD (ng/ml)	23,4+/-6,7	24+/-9,2	23,9+/-8,9	23,9+/-8,3	NS
Breastfeeding(%)	51,8	55,5	64,7	45,8	P=0,06
Thyroiditis(%)	3,57%	1,7	2,22	4,4	P=0,05
Coeliac disease	5,36%	1,79	2,22	4,44	P<0,05
Spring	100	0	33,33	66,67	P<0,05
Summer	77,7	22,23	46,66	53,4	P<0,05
Autumn	50	50	37,5	62,5	P<0,05
Winter	67,7	32,3	40	60	P<0,05

Indicence of KDA (ages)



HBA1c At diagnosis



There was a significant difference ($p < 0.005$) between the value of C-peptide in DM that presented with KAD: 0.27 ng/ml compared to those that did not: 0.43 ng/ml. There was significant difference in the evaluation of pancreatic reserve in patients with KDA vs without KDA ($p < 0.005$)

In the first period, 68.9% were referred from ambulatory, versus 43% in the second period ($P < 0.05$).

The average evolution at diagnosis was 2.8 weeks

CONCLUSIONS

We believe that the promotion of diabetological education programs, awareness and clinical recognition, is fundamental since it would allow early diagnosis and corresponding decrease of the number of serious complications.

