

LETTER TO THE EDITOR

Comment about the article "Type 1 diabetes mellitus prevalence and care in children under 15 years old in Asturias"*



Comentarios sobre el artículo «Prevalencia y datos asistenciales de la diabetes mellitus tipo 1 en menores de 15 años en Asturias»

Dear Sir,

We have read the original paper entitled "Type 1 diabetes mellitus prevalence and care in children under 15 years old in Asturias"¹ with special interest. Critical analysis of the situation of the pediatric population in our region is essential in order to advance in the optimum management of these patients. On the other hand, the progressive incorporation of new technologies, mainly continuous subcutaneous insulin infusion (CSII) and continuous glucose monitoring (CGM), represents a fundamental change in the routine care of patients with type 1 diabetes mellitus (T1DM). The data presented by Osorio-Álvarez et al. reflect the situation of T1DM care in pediatric patients in 2015. Fortunately, over the past few years, that situation has gradually changed. In this respect, we wish to present some data referred to the follow-up of pediatric patients diagnosed with T1DM in healthcare areas ^{III} (Avilés), ^{IV} (Oviedo) and ^V (Gijón), corresponding to the situation on 16 April 2019, and which pool the information of most of the patients and reflect the important changes that have taken place since 2015.

In the mentioned areas a total of 145 pediatric patients with T1DM aged 12 months to 16 years are being followed-up on. Thirty-six children are under treatment with CSII, representing 24.8 % of the total patients - though this figure is still far from the 44.4 % reported in the SWEET study.² The rest of the patients are treated with multiple insulin doses (MDI). With regard to CGM, since October 2018 all children in the Autonomous Community of Asturias aged 4–13 years

(adolescents up to 18 years of age have subsequently been included) have access to the flash CGM system. In the particular case of children under 10 years of age, their access to real-time CGM systems has been regulated through the Diabetes Technologies Commission of Asturias. Accordingly, all children currently have access to some CGM system. Specifically, 40 patients (27.5 %) have real-time CGM systems (35 patients integrated with CSII and 5 patients with MDI), and the rest have flash CGM systems (with the exception of some point cases due to patient personal decision).

Therapeutic education (TE) is another fundamental aspect in the care of all patients with T1DM. The fact that only 37.7 % of the patients have received some intervention in this regard should cause us to think. As the authors of the article point out, it is clear that to a greater or lesser extent, all families receive some type of TE at the start and during the course of the disease. Consequently, the mentioned figure appears to reflect deficiencies in data registry in the case histories - a situation which we as the professionals that care for these patients must correct. It may also reflect problems in digitalization of the case histories, since the transition from paper to electronic history format took place during that period. However, we are aware that a significant proportion of families did not have continued access to a quality and up to date TE. Therapeutic education in diabetes is the main tool for implicating the family environment in the care of pediatric patients with T1DM, as well as for training caregivers to control the disease as far as possible, prevent acute decompensation episodes (hypoglycemia, hyperglycemia), and reduce the risk of chronic complications.³ It has been widely shown that TE in childhood and adolescence results in benefits in terms of both blood glucose control and psychosocial aspects. All children and their families should have access to structured, quality TE adapted to the age of the patient and to the needs of the family, in order to ensure increased treatment effectiveness, including the incorporation of new diabetes technologies (particularly CSII and CGM systems).⁴

At present, structured educational programs with different levels of knowledge (survival, basic and advanced) are available, based on the needs of each patient and family, as well as recycling and specific sessions for using CGM systems and support for using digital tools. Practically all the patients followed-up on by the public health system have received TE interventions.

Lastly, although there has been a significant change in recent years in relation to the incorporation of new

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technologies and TE in the management of T1DM in pediatric patients, we are of the opinion that there is still a long way to go. Teamwork and coordination among the different areas are essential to develop diagnostic, monitoring, treatment and TE protocols, as well as to promote the incorporation of new technologies and the protocolized implementation of telemedicine. All this should be done from a perspective focused on the patient and family, instructing them through training and promoting their autonomy and responsibility in self-care.

References

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