

## EDITORIAL

## Endocrinology, Diabetes and Nutrition: An overview of the year 2020<sup>☆</sup>



### Endocrinología, Diabetes y Nutrición: balance del año 2020

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*Comité editorial Endocrinología, Diabetes y Nutrición*

Dear readers, the word “pandemic” and all that surrounds it have undoubtedly focused much of our attention over the year that is now coming to a close. The greatest worldwide health crisis of the last century has not only radically changed our way of life, but has transformed our work at both healthcare and research level. The journal is no stranger to this drama, and has published interesting articles linking COVID-19 to different aspects of endocrinology, diabetes and nutrition. However, the pages of the ten numbers we complete today have also covered many other areas. In the spirit of wishing you all a significantly better 2021 and, as we did last year, we now offer you a brief review of what the editorial board feels to have been the most relevant topics in the course of this year. Greetings, and we will soon meet again in January.

#### Type 1 diabetes

Among the original articles on type 1 diabetics, early this year we had an elegant randomized, controlled clinical trial on the effect of rosehip seed oil upon finger capillary prick injuries in children. Several epidemiological studies were published in children and young individuals referred to the incidence of the disease in Bogotá (Colombia); unrecognized hypoglycemia in the transition to adult endocrinological care; and to adherence to physical activity recommendations. The effects of a summer camp on quality of life in

children and adolescents with type 1 diabetes were also evaluated. González-Lamuño et al. reported their obstetric and perinatal findings in pregnant women with type 1 diabetes. Lastly, this same number reported the incidence of childhood type 1 diabetes in Gran Canaria in the period 2006–2018, confirming the Canary Islands as the region with the highest incidence in Spain.

#### Type 2 diabetes

In the field of diabetes, interesting review articles have been published in our journal. The group from Hospital Clínico San Carlos shared its experience in the detection, prevention and treatment of gestational diabetes; Castro-Oliveira et al. reviewed the correlation between genotype and phenotype in maturity-onset diabetes of the young (MODY) and its therapeutic implications; and Gimeno-Orna et al. emphasized the need for adequate assessment and treatment of patients with diabetes in order to reduce their residual cardiovascular risk. Among the original articles, Díaz-Vera et al. reported a prevalence of dyslipidemia of 85% in patients with type 2 diabetes in Cantabria. Also of great interest were the contributions of Del Razo-Olvera et al., developing and validating a risk scale to predict the occurrence of type 2 diabetes in Mexican women of reproductive age; and those of a study by the University of Yazd, revealing the importance of antiinflammatory miRNAs in the early diagnosis of type 2 diabetes. The usefulness of educational interventions targeted to professionals has been reflected in the increased use of basal-bolus regimens during hospital admission at Hospital Sant Pau in Barcelona. The usefulness of educational measures targeted to patients has been evidenced in the overcoming of barriers to adherence to a nutritional plan and in improving the pattern of food consumption, in two

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respective studies in Mexico and Costa Rica. Also in Mexico, Reséndiz-Lara et al. described the possibilities of virtual platforms in increasing knowledge and improving metabolic control in patients. Last but not least, the COVID-19 pandemic has also had an impact in our journal. The Spanish Diabetes and Pregnancy Group (Grupo Español de Diabetes y Embarazo [GEDE]) has published simplified recommendations for the diagnosis of hyperglycemia during pregnancy, and an editorial has reviewed the consequences of the pandemic in people with diabetes.

## Obesity

There have been several interesting articles on the topic of obesity. A genetic study has been presented, referred to the CC genotype of variant rs266729 of the ADIPOQ gene, which is associated to elevated adiponectin levels together with low LDL-cholesterol, glucose, insulin and HOMA index values after weight loss. Another two articles have been published on ghrelin. In the first article, increased weight loss and decreased plasma ghrelin levels were recorded after neurostimulation treatment of the T6 dermatome in obese individuals. The second article reported an increase in fasting acylated ghrelin levels after one year of follow-up with two surgical techniques (gastric bypass and vertical gastrectomy), in the presence of a weight loss of 30%.

Finally, we have had a very useful article in clinical practice on the management of diarrhea after bariatric surgery, detailing the steps for a good differential diagnosis, and suggesting possible treatments.

## Clinical nutrition

With regard to clinical nutrition, we could not ignore COVID-19 this year, and in this respect an editorial has described the recommendations of the SEEN on medical nutritional treatment. The CIPA nutritional screening tool has reflected a high prevalence of disease-related malnutrition (DRM) in surgical patients, with relevant prognostic implications. A description has also been given of the role of big data tools in the detection of DRM and the clinical impact of postoperative immunonutrition in patients with head and neck cancer. On the other hand, a review has been made of the interest of low creatinine as a marker of low muscle mass and of the sociosanitary needs in patients with hereditary fructose intolerance in Spain.

## General endocrinology

In the field of adrenal gland disease, mention must be made of the publication of two clinical guides on the management of acute adrenal insufficiency and adrenal incidentalomas. The role of the study of aberrant receptors in patients with ACTH-dependent Cushing's syndrome and macronodular hyperplasia has also been highlighted. Aggressive adenohypophyseal tumors, and specifically their diagnosis and multimodal therapeutic management, have been the subject of an editorial and a review. On the other hand, the usefulness of the prolactin curve in detecting false

hyperprolactinemia, and the phenotypic pattern of prolactinomas resistant to dopamine agonists have been analyzed. In pediatric endocrinology, the pituitary gland MRI findings have been related to the response to GH treatment in isolated deficiencies, and emphasis has been placed on the need for adequate endocrinological assessment to establish an earlier diagnosis of intracranial germline tumors. Regarding bone metabolism, the clinical management algorithms for phosphorus disorders have been reviewed. With regard to primary hyperparathyroidism, diagnostic and therapeutic delays remain a problem, and the risk factors associated to the occurrence of hungry bone syndrome after parathyroidectomy have been described. Finally, in the field of clinical management, emphasis has been placed on the need to record and code clinical diagnoses in outpatient clinics of Endocrinology and Nutrition. Along the same lines, a tool has been developed allowing the analysis of cases, taking into account the complexity inherent to the disease condition seen in outpatient clinics, and thus underscoring the value of outpatient activity in our specialty.

## Thyroid gland

In the field of thyroid disease, the year started with two studies published in the first issue. The *TIROGEST* study described the road that still lies ahead for us in the management of gestational hypothyroidism, and the *SETI* study analyzed the impact of selenium supplementation in sub-clinical hypothyroidism due to autoimmune thyroiditis. The January issue also included an excellent review of the future challenges related to iodine nutrition in Spain. In February, another publication, the ETIEN 3 study, analyzed the diagnostic performance of the ultrasound thyroid nodule risk assessment system of the *American Thyroid Association*. In March, Familiar-Casado et al. reported the results of a series of thyroid nodules treated with a single radiofrequency ablation session, and Marín-Ureña et al. addressed the recurrent problem of the need for neonatal screening in children born to mothers with autoimmune thyroid disease. We returned to the topic of iodine nutrition in the April issue - this time in Mexican schoolchildren, while from Argentina they presented a study on the relationship between hepatitis C virus, HIV, interferon treatment and autoimmune thyroid dysfunction. In May, a study by Ruíz et al. reported on the differences between papillary microcarcinomas according to whether they were incidental findings or clinically diagnosed. The sixth issue reported a systematic review and meta-analysis of preoperative laryngeal paralysis in thyroid surgery, and Arrizabalaga et al. alerted us to the important variations in iodine content in conventional ultra-high temperature processed milk (UHT) cow's milk. The results of a survey of the members of the SEEN on the management of thyroid nodules in Spain were published in the seventh issue. The following month brought us the study on the usefulness of <sup>18</sup>F-FDG PET/CT in patients with differentiated thyroid carcinoma with incomplete biochemical response or indeterminate response. Also in the field of Nuclear Medicine, the ninth issue offered a study on the calculation of <sup>131</sup>I doses for the treatment of hyperthyroidism. Lastly, in this December issue, we have returned to iodine nutrition - this time in the pregnant population.