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Evaluation of the impact of the COVID-19 pandemic on gestational diabetes screening: DIABE-COVID Survey

Evaluación del impacto de la pandemia COVID-19 en el cribado de la diabetes gestacional: encuesta DIABE-COVID

Dear Editor,

Since the onset of the COVID-19 pandemic, pregnant women have been exposed to a higher risk of infection during health centre visits for reasons such as screening and/or diagnostic tests for gestational diabetes and its follow-up, if necessary. Prior to the COVID-19 pandemic, the Spanish Diabetes and Pregnancy Group (GEDE) (first page of Appendix 1) recommended two-stage screening, beginning with the O'Sullivan test (50 g of glucose) and followed by the 100-g oral glucose tolerance test if the O'Sullivan test was positive ($\geq$140 mg/dl). However, during the COVID-19 pandemic and with a view to minimising pregnant women's risk of exposure during these tests, the GEDE, together with other scientific societies,[1,2] published (version 1.0 in March 2020,[3] version 1.1 in April 2020[4]) updated specific recommendations.[5–7] These consisted of measuring HbA1c, basal plasma glucose or random plasma glucose if the usual diagnostic process could not be followed.

One year on, the GEDE sent out a survey to its members to assess the impact of the pandemic on gestational hyperglycaemia screening and diagnosis and whether any changes have been made in this regard.

This was a cross-sectional study in which all members of the GEDE were invited to take part. The GEDE has 31 members in total, both from the Spanish Diabetes Society [Sociedad Española de Diabetes, SED] as well as the Spanish Society of Gynaecology and Obstetrics [Sociedad Española de Ginecología y Obstetricia] and Family and Community Medicine [Sociedad Española de Medicina de Familia y Comunitaria], from several different autonomous communities (map by community) (Fig. 1). The group is a representation of gestational diabetes care provided in Spain (23 centres) and is made up of specialists in endocrinology and nutrition (18), obstetrics and gynaecology (12) and family and community medicine (1).

An electronic survey was developed (Google Forms®); the survey consisted of 16 questions about screening and diagnosis before and during the pandemic (Appendix 2).

The survey was designed by three of the authors (MG, MM and MV), initially reviewed by a further three authors (IV, RC and MC) and finally by the remaining members of the GEDE.

The survey was sent to the group members email distribution list by the secretary of the SED.

Statistical analysis: a descriptive analysis of the answers obtained was performed. The data were expressed as n (%).

The survey revealed a change in the screening/diagnosis method in seven of the 22 participating centres in the first quarter (31.8%), in six centres in the second quarter (27.3%) and in eight centres in the third quarter (36.4%), with changes being made by the same centres in all three quarters. These centres were located in the communities of Andalusia, the Canary Islands, Catalonia, Madrid and the Basque Country.

The results of the survey show that the onset of the COVID-19 pandemic forced a substantial number of centres belonging to the GEDE group to change their gestational hyperglycaemia screening and diagnosis procedure, reflecting the different realities experienced by each centre according to the epidemiological data.

Finding a balance between preventing the spread of COVID-19 and reducing the clinical risk of gestational hyperglycaemia is not easy to achieve. Recent recommendations promote diagnostic approaches that limit exposure in blood draws but result in more cases of undiagnosed gestational hyperglycaemia, which could potentially increase the risk of adverse pregnancy outcomes.

Options should be weighed up based on the epidemiological situation at each centre and progressively adapted as the pandemic progresses.

The gestational hyperglycaemia screening and diagnosis survey administered to GEDE members shows that 22%–27% of the centres (between six and eight out of 22 centres, depending on the quarter) adapted their procedures due to the COVID-19 pandemic in the autonomous communities where the epidemiological situation was most severe.

The complete survey can be viewed at: https://www.sediabetes.org/grupos_de_trabajo/diabetesy-embarazo/

Appendix A. The members of the Spanish Diabetes and Pregnancy Group (GEDE) are shown in the appendix

Appendix 1. Members of the GEDE

Acosta Delgado, Domingo. Hospital Universitario Virgen del Rocío [Virgen del Rocío University Hospital], Seville.

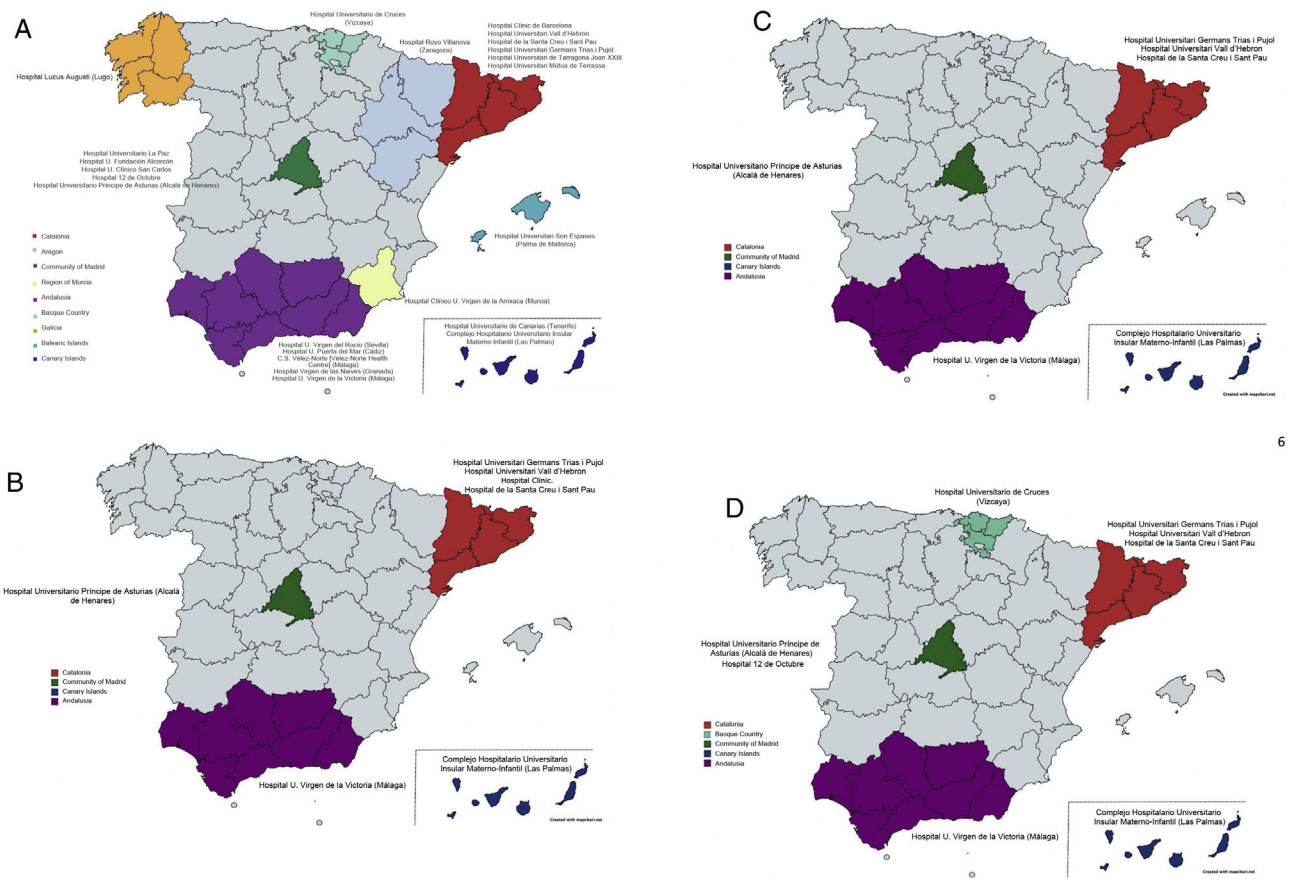

Figure 1 A) Map by community. B) Centres with change of screening strategy in the first quarter. C) Centres with change of screening strategy in the second quarter. D) Centres with change of screening strategy in the third quarter.

Ballesteros Pérez, Mónica. Hospital Universitari de Tarragona Joan XXIII [Joan XXIII Tarragona University Hospital], Tarragona.

Bandres Nivela, María Orosia. Hospital Royo Villanova [Royo Villanova Hospital], Zaragoza.

Bartha Rasero, José Luis. Hospital U. La Paz [La Paz University Hospital], Madrid.

Bellart Alfonso, Jordi. Hospital Clínic de Barcelona [Barcelona Clinical Hospital], Barcelona.

Blanco Carnero, José Eliseo. Hospital Clínico Universitario Virgen de la Arrixaca de Murcia [Virgen de la Arrixaca University Clinical Hospital], Murcia.

Botana López, Manuel. Hospital Lucus Augusti [Lucus Augusti Hospital], Lugo.

Bugatto González, Fernando. Hospital Universitario Puerta del Mar [Puerta del Mar Hospital], Cádiz.

Codina Marcet, Mercedes. Hospital Son Espases [Son Espases Hospital], Palma de Mallorca.

Corcoy Pla, Rosa. Hospital Santa Creu i Sant Pau [Santa Creu i Sant Pau Hospital], Barcelona.

Cortázar Galarzar, Alicia. Hospital de Cruces [Cruces Hospital], Baracaldo, Vizcaya.

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Perea Castilla, Verónica. Hospital Universitari Mutua Terrassa [Mutua Terrassa University Hospital], Barcelona.

Picón César, María José. Hospital Universitario Virgen de la Victoria [Virgen de la Victoria University Hospital], Málaga.

Rubio García, José Antonio. Hospital Universitario Príncipe de Asturias [Príncipe de Asturias University Hospital], Alcalá de Henares-Madrid.

Soldevila Madorell, Berta. Hospital U. Germans Trias i Pujol [Germans Trias i Pujol University Hospital], Badalona - Barcelona.

Vega Guedes, Begoña. Complejo Hospitalario Universitario Insular Materno-Infantil [Island Mother and Child University Hospital Complex], Las Palmas, Las Palmas.

Vinagre Torres, Irene. Hospital Clínico y Provincial de Barcelona [Clinical and Provincial Hospital of Barcelona], Barcelona.

Wägner Falhin, Ana María. Complejo Hospitalario Universitario Insular Materno-Infantil [Island Mother and Child University Hospital Complex], Las Palmas, Las Palmas.

Appendix B. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.endinu.2022.07.005.

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Abrupt-onset diabetes mellitus secondary to pembrolizumab

Diabetes mellitus de comienzo abrupto secundaria a pembrolizumab

Over recent years, immunotherapy has been increasingly used to treat several types of cancer. Its aim is to present an immune response against the tumour through monoclonal antibodies that inhibit immune checkpoints. These include drugs that inhibit the PD-1 ligand (PD-L1), cytotoxic T lymphocyte antigen 4 (CTLA-4) inhibitors and others, such as pembrolizumab and nivolumab, which inhibit the programmed cell death receptor 1 (PD-1) on the surface of T cells. As side effects, they can cause autoimmune disorders in many organs of the endocrine system and beyond, including hypophysitis, thyroiditis, adrenalitis and diabetes mellitus (the latter two are rarer).[1] We report a case of sudden-onset diabetes mellitus at our centre following treatment with pembrolizumab.

Our patient was a 74-year-old woman whose only history of relevance was pT2aN0M0 nodular melanoma (stage IB) in the right pretibial region in 2009 that was surgically treated. She had a recurrence in 2015 in the form of a 5-mm skin metastasis, which was removed, and a second recurrence in 2019 with two metastatic lesions contiguous to the graft, multiple lung metastases as well as metastases in the subcutaneous cellular tissue of the right axillary region and chest wall, at which point treatment was started with seven cycles of pembrolizumab every 21 days for six months. The last cycle was 19 days before she attended the Accident and Emergency department. She came to the Accident and Emergency department due to a 48-h history of general malaise, asthenia, dry mouth, polyuria, polydipsia, abdominal pain and vomiting. Her last basal blood glucose