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Scientific letter

**Impact of the SARS-CoV-2 pandemic on the early diagnosis of melanoma<sup>☆</sup>**



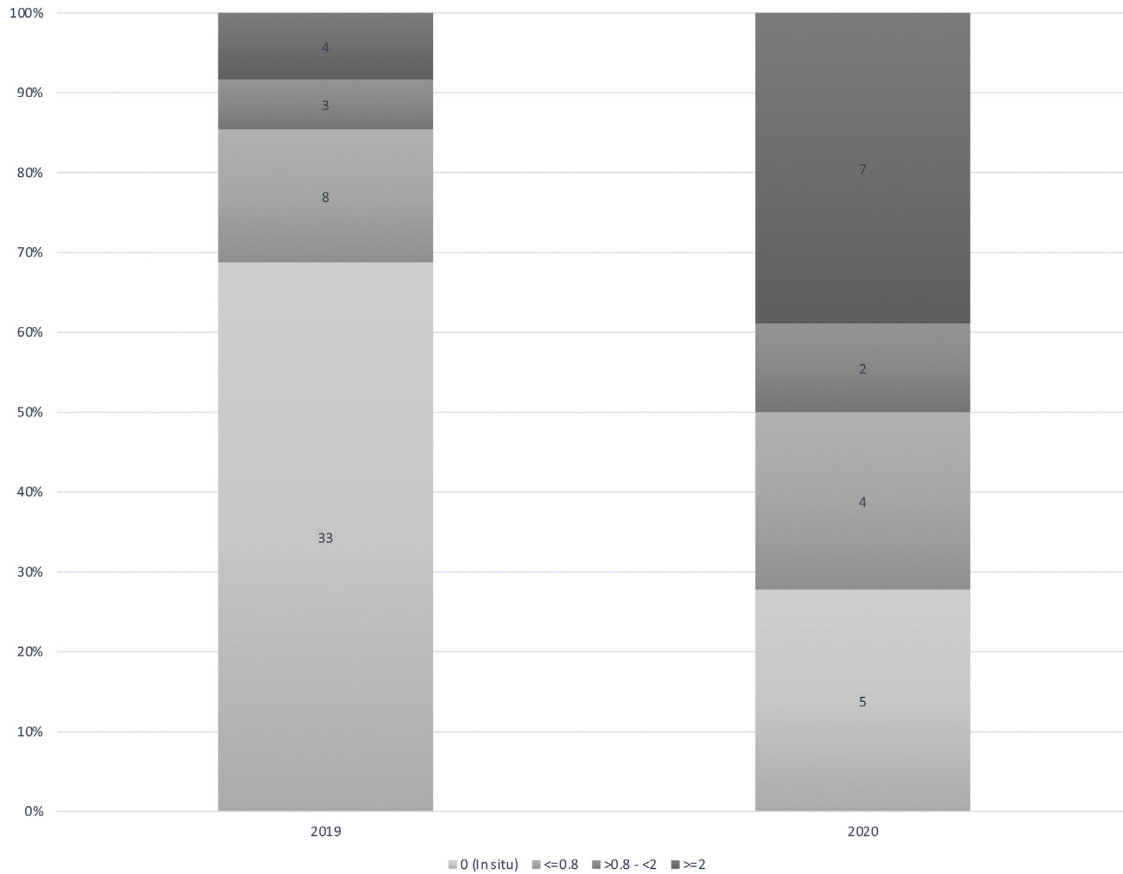
**Impacto de la pandemia SARS-CoV-2 en el diagnóstico precoz del melanoma**

To the Editor,

The SARS-CoV-2 coronavirus pandemic, which emerged in Wuhan<sup>1</sup> (China) several months ago, has led to the collapse of health care in many countries around the world, including Spain. Since the beginning of the pandemic, Spanish dermatologists have

been warning of the risk of a delay in the diagnosis of melanomas as a consequence of the lockdown following the state of alarm.<sup>2,3</sup> The objective of this study was to evaluate the impact of the pandemic on the detection and early diagnosis of new cases of melanoma, as well as identifying the differential clinical presentation characteristics compared to the pre-COVID period.

A retrospective cross-sectional study was carried out in which the new cases of primary cutaneous melanoma (PCM) registered during the period from April to August 2020 diagnosed at the Costa del Sol Hospital were compared with the same period of the previous year. Data were extracted from the anatomical pathology skin cancer registry. Epidemiological (sex, age) and clinicopathologi-



**Fig. 1.** In 2019, 33 cases were melanomas *in-situ* and 4 melanomas over 2 mm in thickness, while in 2020, 5 cases were melanomas *in-situ* and 7 were melanomas over 2 mm in thickness.

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cal (location, tumour thickness, ulceration, mitosis) characteristics were evaluated. A descriptive analysis was performed using location measurements and frequency distribution. The Chi-square test and the Mann–Whitney U test were used to compare differences. Significant primary outcome variables were expressed as *odds ratio* (OR) with their respective 95% confidence intervals (95% CI). The level of statistical significance was established in  $p < 0.05$ .

During the period from April to August 2019, 48 new cases of PCM were identified, which represents a cumulative incidence of 28 per 100,000 inhabitants (95% CI: 23.2–33.7), compared to 18 cases diagnosed in the same period of months in 2020, which means a cumulative incidence of 10.2 per 100,000 inhabitants (95% CI: 7.4–13.8), with significant differences between both periods ( $p < 0.001$ ). There were no differences between periods in relation to sex, nor differences in relation to age. The most common anatomical location of melanomas diagnosed in 2019 was the trunk (45.8%), while in 2020 the most common location was the head (47.4%) ( $p = 0.089$ ). In terms of the histopathological characteristics of the tumours, in 2019, 68.8% of the cases were melanomas *in situ* and 8.3% were melanomas over 2 mm in thickness, while in the same period of 2020, 27.8% were melanomas *in situ* and 38.9% melanomas over 2 mm in thickness ( $p = 0.001$ ) (Fig. 1). The risk of presenting a thick melanoma in 2020 patients compared to 2019 obtained a *odds ratio* of 7 (95% CI: 1.7–28.2). When analysing other histopathological findings, 7.1% of melanomas showed ulceration in the 2019 period compared to 21.4% during the 2020 period ( $p = 0.596$ ) and 42.9% showed mitosis in the 2019 period compared to 75% during the 2020 period ( $p = 0.209$ ).

The main finding observed is the significant decrease in new diagnoses of PCM during the pandemic, compared to the same period in 2019 (62%). This decline in diagnosis has rested primarily on *in situ*. There has also been an exponential increase in the diagnosis of thick melanoma compared to the same period in 2019, with a 7-fold increased risk of having a thick melanoma during the pandemic (OR: 7). Thick melanoma also carries with it the presence of other predictors of poor prognosis, such as location on the head, ulceration, and the presence of mitosis, although there was no statistical significance when comparing these findings with those of the 2019 period. This increase in the diagnosis of thick

melanomas has implications not only for survival, but also for the associated healthcare costs, which include imaging tests for staging and follow-up, as well as adjuvant treatment.

The compulsory lockdown of the population throughout the national territory during the state of alarm, the fear of contagion and the difficulties of access to primary care as a result of the collapse of health services have likely been determining factors causing patients not to go to hospital or to do so with delay. Therefore, it is essential to restore face-to-face primary care and reduce accessibility barriers to the specialist using effective and efficient telematic tools such as teledermatology.<sup>4,5</sup>

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## Mental health and psychological capital among Spanish health care workers during COVID-19 pandemic<sup>☆</sup>



### Salud mental y capital psicológico en profesionales sanitarios españoles durante la pandemia de COVID-19

To the Editor,

Previous studies conducted during the COVID-19 pandemic in other countries have shown an increase in symptoms associated with mental health problems in healthcare professionals.<sup>1</sup> Most of these studies have focused on risk factors and fewer on protective factors. Additionally, a large part of them have been carried out abroad.

Therefore, we propose to study the prevalence of mental health problems in a sample of Spanish health professionals, and the asso-

ciated risk factors, as well as to know if psychological capital or any of its factors acts as a protective resource in the context of the pandemic.

To this end, a survey was designed and submitted electronically. The sample was collected through a *snowball sampling* procedure and it consisted of 294 healthcare professionals in contact with SARS-CoV-2 infected patients.

To study the prevalence of mental health problems, the *General Health Questionnaire* (GHQ), 12-item version, was used. Cronbach's alpha was 0.857. To correct the test, the GHQ score was used, more appropriate when the objective is to diagnose cases. Following the recommendations of Goldberg et al.,<sup>2</sup> and considering that the mean of the present study is 4.73, the cut-off point was established at 3. The psychological capital scale was used to measure psychological capital,<sup>3</sup> a 16-item scale, consisting of 4 factors: resilience (alpha = 0.684); hope (alpha = 0.809); optimism (alpha = 0.705) and self-efficacy (alpha = 0.779). Data collection took place during the period of lockdown (April 2020).

The results show that 74.9% of the participants have GHQ scores  $\geq 3$ . The main characteristics of the sample can be seen in

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