

## Correspondence

**The impact of COVID-19 on nonmelanoma skin cancer: the experience of an Irish dermatology department. Comment on: 'Influence of Covid-19 confinement on the size of malignant skin tumours surgically removed at a Spanish hospital'**

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Dear Editor,

We read with interest the recent report by Conde-Taboada *et al.*<sup>1</sup> in *Clinical and Experimental Dermatology*, describing their finding on the impact of COVID-19 on the size of malignant skin tumours seen in a Spanish hospital. In that study, no overall difference was seen in the size of the tumours removed, although those removed from men after confinement were significantly larger. We present our findings on the impact of the pandemic on the rates of nonmelanoma skin cancer (NMSC) diagnosis and tumour size from an Irish dermatology department, the results which demonstrate a contrast to the findings of Conde-Taboada *et al.*<sup>1</sup>

In this study, we identified the total number of patients who attended for diagnostic skin biopsy or excision from January to December 2019 (prepandemic), and compared the rates of diagnoses and size of NMSC lesions diagnosed during this period with those for the period January 2020 to December 2021 (during the pandemic). Patients were identified through departmental histology and operative records. Details on demographics, lesion site and clinicopathological characteristics, including subtype and size, were extracted and analysed. Patients without comparison data within this period or who did not undergo surgical treatment were excluded from the study.

There was a significant decrease of 13.4% in the number of patients diagnosed with NMSC in 2020 compared with 2019, with a further significant decrease of 23.1% in 2021 compared with 2019 ( $P < 0.05$ ). Similarly, the total number of NMSC lesions diagnosed decreased by 12.2% in 2020 compared with 2019, with a further decrease of 27.4% in 2021 compared with 2019 ( $P < 0.05$ ). NMSCs diagnosed in 2020 had significantly ( $P < 0.01$ ) increased in size, by 22.2% compared with 2019. Although NMSCs diagnosed in 2021 had reduced in size from 2020, they were larger than in the prepandemic period (mean 12.47 mm vs. 10.97 mm, respectively). This size increase may

have a significant impact on the complexity of surgical procedures, with potential morbidities from tumours treated on the head and neck, which had the highest tumour count per site compared with other parts of the body in this study ( $P < 0.01$ ).

The numbers of basal cell carcinoma (BCC) vs. squamous cell carcinoma (SCC) were similar between 2019 and 2021 (Table 1). However, when further subdivided, the percentage of high-risk SCCs increased from 39.6% in 2019 to 51.8% in 2020, and the percentage of high-risk BCCs increased from 51.6% in 2019 to 61.5% to 2020.<sup>2,3</sup>

**Table 1** Rates of diagnosis and clinical characteristics of non-melanoma skin cancers diagnosed from 2019 to 2021.

Parameter	Year		
	2019	2020	2021
Patients, <i>n</i>	201	174	155
Lesions, <i>n</i>	238	210	173
Total adult dermatology clinics, <i>n</i>	144	146	162
Total clinic attendance, <i>n</i>	3933	3165	3620
Total MOPs, <i>n</i>	576	368	509
Age, years; mean	73	71.7	72.3
Sex, <i>n</i> (%)			
Male	128 (63.6)	102 (58.6)	97 (62.5)
Female	73 (36.3)	72 (41.3)	58 (37.4)
Body site, <i>n</i>			
Head and neck	154 (64.7)	133 (63.3)	108 (62.4)
Trunk	44 (18.4)	42 (20)	32 (18.4)
Upper limb	23 (9.6)	25 (11.9)	23 (13.2)
Lower limb	17 (7.14)	10 (4.76)	10 (5.7)
Subtype, <i>n</i> (%)			
BCC	180 (75.6)	156 (74.2)	126 (72.8)
SCC	58 (24.3)	54 (25.7)	46 (26.5)
Atypical fibroxanthoma	0	0	1 (0.57)
Lesion size, mm; <i>n</i> (%)			
1–4	38 (15.9)	14 (6.6)	19 (10.9)
5–10	118 (49.57)	115 (54.76)	85 (49.1)
11–20	58 (24.3)	41 (19.5)	46 (26.5)
> 20	21 (8.8)	32 (15.2)	21 (12.1)
Not specified	3 (1.2)	8 (3.8)	2 (1.1)
Patients with multiple NMSCs, <i>n</i>	32 (15.9)	25 (14.3)	17 (10.96)

BCC, basal cell carcinoma; MOP, minor operative procedure; NMSC, nonmelanoma skin cancer; SCC, squamous cell carcinoma.

There was no significant change in mean age at diagnosis (73, 71 and 72 years in 2019, 2020 and 2021, respectively). Men were less likely to be diagnosed with NMSCs in 2020 compared with 2019 (58% vs. 63%); however, they were more likely to present with larger lesions during this time ( $P < 0.05$ ).

The COVID-19 pandemic brought significant disruption to dermatology services in Ireland, through reduction in skin cancer referrals, cancellation of elective procedures and reduced clinic capacity, coupled with a reluctance of patients to attend the hospital outpatient setting.<sup>4,5</sup> This study demonstrates that COVID-19 has had a variable impact across dermatology centres worldwide, due to the course of its global spread and the differing approaches to public health restrictions and implementation of national vaccination programmes. As 2022 brings an easing of public health restrictions, further research will be useful to evaluate the lasting impact of the pandemic on the diagnosis and prognosis of NMSCs. We believe that it is useful to compare findings between centres in different countries to learn from this experience should we encounter a health crisis such as this again in the future.

**Anna Wolinska,<sup>1</sup>**  **Gregg Murray,<sup>1</sup>**   
**Stephanie Bowe,<sup>1</sup>**  **Sinead Collins,<sup>1</sup>** **Clíona Feighery<sup>1</sup>** and  
**Aizuri Murad<sup>1,2</sup>** 

<sup>1</sup>Department of Dermatology, Our Lady of Lourdes Hospital, Drogheda, Co., Louth, Ireland and <sup>2</sup>School of Medicine, University College Dublin, Dublin, Ireland  
 E-mail: [annawolinska@alumnirocsi.com](mailto:annawolinska@alumnirocsi.com)  
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#### Conflict of interest

The authors declare that they have no conflicts of interest.

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#### Ethics statement

Ethics approval and informed consent are not applicable.

#### Data availability

The data that support the findings of this study are available on request from the corresponding author.

#### References

- 1 Conde-Taboada A, Iglesias-Puzas Á, Sirgado A *et al*. Influence of COVID-19 confinement on the size of malignant skin tumours surgically removed at a Spanish hospital. *Clin Exp Dermatol* 2021; **47**: 578–80.
- 2 Keohane S, Botting J, Budny P *et al*. British Association of Dermatologists guidelines for the management of people with cutaneous squamous cell carcinoma 2020. *Br J Dermatol* 2021; **184**: 401–14.
- 3 Nasr I, McGrath E, Harwood C *et al*. British Association of Dermatologists guidelines for the management of adults with basal cell carcinoma 2021. *Br J Dermatol* 2021; **185**: 899–920.
- 4 Murray G, Roche D, Ridge A *et al*. Response to 'Reduction in skin cancer diagnosis, and overall cancer referrals, during the COVID-19 pandemic'. *Br J Dermatol* 2020; **184**: 580–1.
- 5 Health Protection Surveillance Centre Ireland Guidance on COVID-19 in Ireland. Available at: <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/> (accessed 5 April 2022).