

The incidence of melanoma during the COVID-19 pandemic in a Swedish health care region without lockdown



To the Editor: COVID-19 was declared a pandemic in March 2020.^{1,2} The first case of SARS-CoV-2 in Sweden was confirmed on January 24, 2020, at the Ryhov County Hospital in Jonkoping. Delayed melanoma diagnosis strongly influences patients' survival.³ Several studies have reported the impact of the COVID-19 pandemic on skin cancer incidence.⁴ According to a study from England, melanoma incidence has decreased compared with the incidence of all types of cancer overall (excluding nonmelanoma skin cancers).⁵ Therefore, this study aimed to test the hypothesis that the number of newly diagnosed hospital melanoma cases decreased during the COVID-19 pandemic due to reduced access to specialist care.

A retrospective, observational cohort study was conducted in the 3 hospitals (Ryhov County hospital, Highland hospital of Nassjo, and Varnamo hospital)

in Region Jonkoping County, part of the southeast health care region in southeast Sweden, whose population is approximately 360,000.

We reviewed records from these 3 hospitals to identify newly diagnosed melanoma cases during the COVID-19 pandemic (from April 1, 2020, to March 31, 2021). Data were compared with the respective numbers from the reference nonpandemic period (from April 1, 2019, to March 31, 2020). The data were extracted on July 16, 2021, to ensure that all information needed for the study was reported before data extraction. All patients reported with melanoma diagnosis during the COVID-19 pandemic or reference period were included in the study. The study was a quality review study approved by the operations manager and Head of Department of Dermatology at the Ryhov County Hospital in Jonkoping County Region according to Section 31 of the Health and Medical Services Act, which has been published in *Lakartidningen* 2015; 112: C9CL.

The study included 244 patients with newly diagnosed melanoma cases, including both melanoma in situ (stage 0) and invasive melanoma

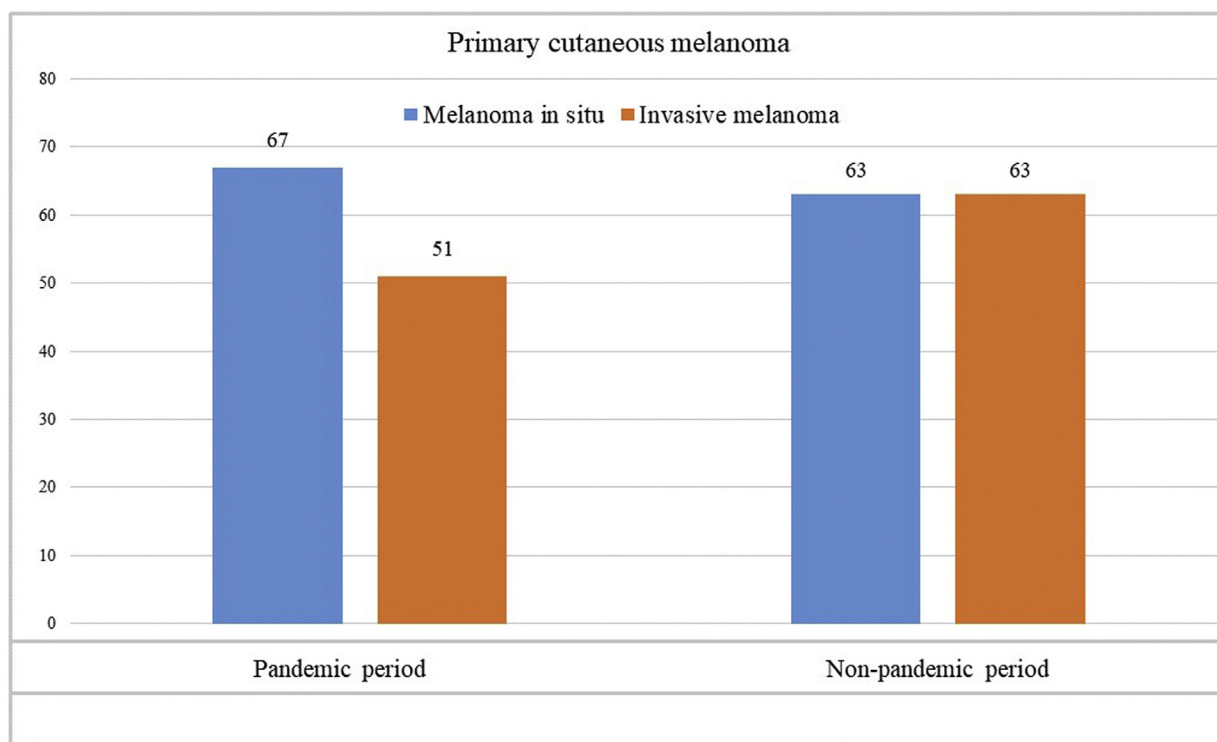


Fig 1. Primary cutaneous melanoma cases during the pandemic and nonpandemic periods.

(stage I-IV) according American Joint Committee on Cancer (AJCC) melanoma TNM staging system, 8th Edition, during a 24-month period. Sixty-three melanoma in situ and 63 invasive melanoma cases were reported during the nonpandemic period. Sixty-seven melanoma in situ and 51 invasive melanoma cases were reported during the pandemic period (Fig 1).

We observed a slight decrease in the number of newly diagnosed invasive melanoma cases during the pandemic period compared with the nonpandemic period (the diagnoses decreased by 19%, $P = .2620$). A slight increase in the number of melanoma in situ cases is observed during the pandemic period compared with the nonpandemic period (the diagnoses increased by 6%, $P = .726$).

Interestingly, the statistically nonsignificant results led us to conclude that in Region Jonkoping County in Sweden, the number of newly diagnosed melanoma cases (both melanoma in situ and invasive melanoma) remained approximately unchanged during the pandemic compared with the nonpandemic period. Our data are in contrast to the previously published ones from other countries, probably due to mild restrictions and guaranteed access to specialist care in case of melanoma suspicion.

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Conflicts of interest

None disclosed.

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