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comorbidities, an inaccurate histopathologic diagnosis, and publication bias. Future large prospective studies are needed to further investigate the clinical significance of the higher prevalence of malignancy-associated GGA because the true frequency and strength of this association remain unclear. Despite these limitations, this study highlights paraneoplastic disease in 3.5% of patients with GGA.

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None disclosed.

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Impact of COVID-19 delays on skin cancer worry and Mohs micrographic surgery for keratinocytic carcinoma



To the Editor: In March 2020, the National Comprehensive Cancer Network recommended delaying treatment during the COVID-19 pandemic for keratinocyte carcinoma (KC), except for tumors determined to pose a risk of “metastasis or debilitating progression within 3 months.”¹ This study sought to evaluate the impact of the COVID-19 pandemic on cancer worry in patients undergoing Mohs micrographic surgery (MMS) for KCs.

The study was approved by the institutional review boards of Brigham and Women’s Micrographic Surgery Center and Memorial Sloan Kettering Cancer Center. KCs treated with MMS at both the institutions were included in the study if they met the following criteria: (1) MMS was cancelled because of the stay-at-home recommendations and rescheduled from April to August 2020 (“COVID-delay patients”) and (2) MMS was performed between May and August 2019 (“control patients”). Electronic medical records were reviewed for patient demographics, tumor characteristics, and MMS outcomes (Supplementary Table I, available via Mendeley at [10.1016/j.jaad.2021.11.052](https://doi.org/10.1016/j.jaad.2021.11.052)). The cancer worry scale, from the FACE-Q skin cancer module, was completed by all patients prior to surgery.²⁻⁴ The COVID-delay patients were asked 4 additional COVID-19–related questions (Table I). The patient and tumor characteristics as well as MMS outcomes were analyzed using descriptive statistics and frequency tabulation. Analysis of variance was used to evaluate whether certain factors influenced the cancer worry scores, and significant risk factors were analyzed using multivariate analysis of variance. All reported *P* values were 2 sided, and *P* values < .05 were considered statistically significant. The statistical analyses were performed using Stata, version 14.0 (StataCorp).

Supplementary Table I (available via Mendeley) summarizes the details of 191 COVID-delay and 381 control patients (response rate, 75%). The mean time from biopsy to treatment was approximately 3 months longer for the COVID-delay group (COVID-delay patients: 129.0 days [SD, 97.9 days] vs controls: 41.0 days [SD, 44.3 days], *P* ≤ .0001). For MMS variables, there was no significant difference in pre- or postoperative defect size, the mean number of MMS stages, or the complexity of reconstruction. The mean cancer worry scale score

Table I. Results of the COVID-19–related questions

	Combined (n = 143)	BWH (n = 64)	MSKCC (n = 79)
What would you say your skin cancer worry compared with COVID-19 worry is: n (%)			
Less	64 (45)	35 (54)	29 (37)
The same	40 (28)	14 (22)	28 (35)
More	31 (22)	10 (15)	21 (27)
How did you feel when your treatment was delayed (select all): n (%)			
Understood the reason (COVID-19)	119 (84)	49 (75)	72 (91)
Understood the rationale (skin cancer treatment was not urgent)	38 (27)	18 (28)	20 (25)
Was upset about the delay	14 (10)	4 (6)	10 (13)
Did you develop any of the following symptoms after March 1, 2020? n (%)			
Cough	5 (4)	3 (3)	2 (3)
Fever	0 (0)	0 (0)	0 (0)
Sore throat	0 (0)	0 (0)	0 (0)
Nasal congestion or runny nose	1 (1)	2 (2)	0 (0)
Shortness of breath	1 (1)	0 (0)	1 (1)
Muscle aches	0 (0)	1 (1)	0 (0)
Anosmia	1 (1)	0 (0)	1 (1)
History of COVID-19, n (%)	3 (2)	0 (0)	3 (4)

BWH, Brigham and Women's Hospital; MSKCC, Memorial Sloan Kettering Cancer Center.

was similar in all the patients (COVID-delay patients: 45.0 [SD, 17.9] vs controls: 44.7 [SD, 44.7], $P = .9$). The multivariate analysis of variance found higher equivalent cancer worry scores in patients with tumors ≥ 20 mm (+7.9), patients less than 65 years of age (+7.1), and female patients (+4.4). **Table I** summarizes the results of the COVID-19–related questions. About one-quarter of the COVID-delay patients were more worried about their skin cancer (31/143 [22%]), and only 10% (14/143) were upset about the delay. A prior history of cutaneous squamous cell carcinoma and tumor diameter of ≥ 20 mm were associated with being more worried about skin cancer, as determined using a univariate analysis, but neither were significant in the multivariate analysis (prior cutaneous squamous cell carcinoma: odds ratio, 1.9; 95% CI, 0.82–4.2; tumor diameter ≥ 20 mm: odds ratio, 2.5; 95% CI, 0.73–8.7).

Surgical delays occur for many reasons, but the first wave of the pandemic created an opportunity to examine the impact of delays on emotional well-being and surgical outcomes. Surprisingly, a quarter of the COVID-delay patients were more worried about their KC than about a novel, life-threatening viral illness despite surgical outcomes not being affected. These data could be used to enhance patient-centered communication at the time of surgical delays, given the indolent nature of most KCs, which could alleviate cancer worry and improve the overall patient experience.

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Conflict of interest

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A retrospective review of unreimbursed medical care provided through electronic patient portals in dermatologic surgery



To the Editor: Patient portals, based on electronic medical records, allow patients to view medical records and securely message their practitioners. Direct messaging between patients and health care teams improves patient satisfaction.¹ However, the number of patient-initiated messages has increased over time in dermatology and other fields.^{2,3} Although the increasing workload can be optimized, it cannot be eradicated.⁴ Patient portal messaging will likely increase further with the implementation of the 21st Century Cures Act, which allows patients immediate access to their health records.

This study quantified electronic medical record-based patient portal messaging (EPIC MyChart messages) at a single academic institution's dermatologic surgery clinic from 2016 through 2020. Additionally, 500 patient portal messages were retrospectively reviewed for message content from November and December 2020. The MyChart messages were classified into 2 main categories: automated messages (from provider to patient) and medical advice requests (from patient to provider). Encounters in which physicians or nursing staff managed a patient

concern and gave pertinent medical advice outside of the relevant global period were considered as a potential billable encounter.

The ratio of patient portal messages per clinic visit increased each year (Fig 1). The total number of patient clinic encounters also increased during the same period until 2020 (when it declined because of the COVID-19 pandemic).

Of the 500 messages reviewed, 293 (58.6%) were from male patients with a median age of 65 years (SD = 14.1). Three hundred sixteen (63.2%) were automated messages, including medical history questionnaires, appointment changes, and laboratory results. The patient-initiated medical advice encounters (184; 36.8%) were subcategorized, as shown in Table I. In each message encounter, the total number of messages from patients, care teams, and physicians was 3.5 (SD = 2.18). Of the 184 encounters, 72 (39.1%) received a direct physician response to the messages, and 87 (47.3%) total encounters had direct and/or indirect physician involvement. Many messages were sent outside of business hours or included a telephone call (Table I).

Many encounters met the criteria for billable encounters. Because of the nature of dermatologic surgery, a portion (47/184; 25.5%) of the messages were sent within the surgery global period. However, 32.1% of the 184 patient-initiated encounters were classified as billable encounters outside of the global period (Table I).

In a 2-physician dermatologic surgery practice, 32.1% of patient-initiated encounters would be considered as billable encounters outside of the global period. These encounters consisted of a medical professional making medical diagnoses, managing patients' problems, and suggesting alternate courses of treatment. Although these encounters were not billed for at the time of the service, they might have involved an equivalent amount of clinical decision making and liability.

Our results demonstrate an increase in the percentage of patient MyChart messages compared with practitioner clinic encounters, of which many would be considered billable. The major limitations of this study include its retrospective nature and the lack of information on additional telephone encounters in conjunction with the patient portal messages. Because of the COVID-19 pandemic, the Centers for Medicare & Medicaid Services began to pay physician telehealth services the same rate as that paid for in-office visits on an interim basis.⁵ This study and other previous studies provide support for the expansion of the current telehealth reimbursement, including the ability to bill for patient portal messages.²