

Table I. Odds ratios and *P* values for key risk factors for AK of the lower lip

Risk factor	Odds ratio	95% CI	<i>P</i> value
Mustache (yes)	0.06	(0.01, 0.23)	3.0E–04
Age	1.06	(1.01,1.11)	.008
Family history of skin cancer (yes)	2.49	(1.17,5.49)	.019
History of blistering sunburn (yes)	2.3	(1.10,4.96)	.029

AK, Actinic keratosis; CI, confidence interval.

for lip AKs, the fact that lip and other AKs were generally diagnosed on the basis of clinical appearance (presence of focal scale, erythema, leukoplakia, and/or dramatic difference in appearance between a healthy upper lip and a scaly, erythematous, crusted lower lip), and the fact that few of the AKs were subjected to biopsy for histologic confirmation.

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One in a hundred million: Merkel cell carcinoma in pediatric and young adult patients is rare but more likely to present at advanced stages based on US registry data



To the Editor: Published data for pediatric and young adult patients with Merkel cell carcinoma (MCC) are scarce. Case reports from the United States and Europe¹⁻³ suggest that MCC can occur in young persons and may be more aggressive in this setting. We sought to determine the frequency of MCC in pediatric and young adult populations and establish whether MCC is more likely to present at advanced stages in younger people. To minimize referral bias and maximize available data, we used the National Program of Cancer Registries Surveillance Epidemiology and End Results (NPCR SEER)⁴ database, which captures incident cancer cases in more than 98% of the US population.

From 2001 to 2015, there were 27,105 incident cases of MCC (*International Classification of Diseases for Oncology, Third Edition*, code 8247/3) that had been reported to the NPCR SEER database with a defined age at diagnosis, of which only 20 cases (0.07%) were in persons younger than 30 years. Of these young individuals, 75% were 20 to 29 years old. Over this 15-year period, the crude (unadjusted) MCC incidence rates were more than 7000 times higher in individuals at least 85 years of age than in those younger than 30 years (1 in 13,186 person-years versus 1 in 93,023,545 person-years, respectively [Fig 1]). The demographic characteristics of persons with MCC who were younger than 30 years were otherwise similar to those of persons with MCC who were older than 30 years, with a modest male predominance (60%) and predominance of non-Hispanic whites (85%).

Having established the low incidence rate of MCC in individuals younger than 30 years, we next sought to determine whether patients in this subset have more advanced disease. Information on extent of disease at presentation was available for 90% of patients younger than 30 years and 87% of those 30 years or older. All patients with MCC who were younger than 30 years had a defined skin primary, most commonly on the head and neck (44%); in this respect, they were similar to those 30 years or older, of whom 99% had a defined skin primary, of which 43% were on the head and neck. However, extent of disease at presentation differed, with younger individuals being 3 times more likely to present with distant metastatic disease (33% vs 10%) ($P = .01$ [chi-square with Yates correction]) (Fig 2). The high fraction of young patients presenting with metastatic

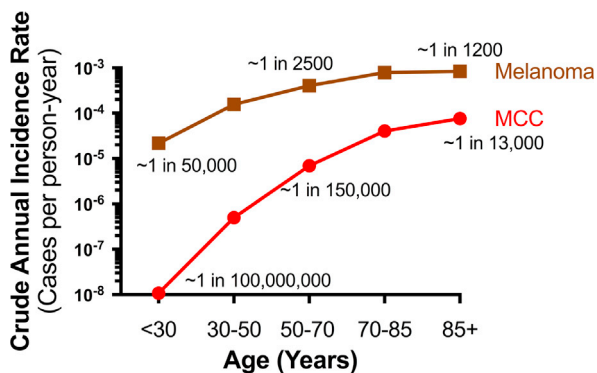


Fig 1. Incidence rates of Merkel cell carcinoma (MCC) and melanoma across the age spectrum. Cases per person-year are shown for the indicated age brackets; crude (unadjusted) incidence rates are as calculated across the 15-year period from 2001 to 2015. Note the logarithmic scale. MCC (*International Classification of Diseases for Oncology, Third Edition*, code 8247/3 [n = 27,105 cases]) is shown as red circles; invasive melanoma (*International Classification of Diseases for Oncology, Third Edition*, codes 8720-3/3, 8730/3, 8740/3, 8742-6/3, and 8760-1/3 [n = 975,396 cases]) is shown as brown squares.

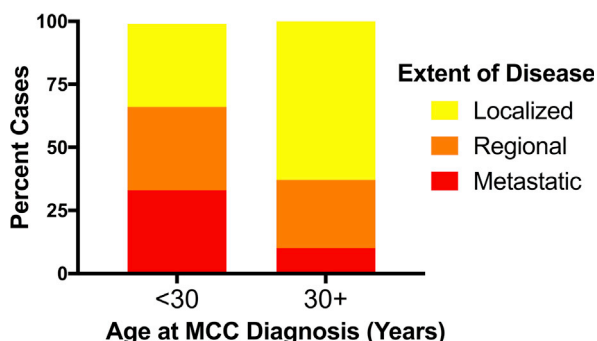


Fig 2. Extent of disease at diagnosis of Merkel cell carcinoma (MCC) by age. The fractions of patients presenting with early versus late disease are shown as a function of age at diagnosis. Data on those younger than 30 years (n = 18) are on the left, and data on those age 30 years or older are on the right (n = 23,666). A significantly higher fraction of pediatric and young adult patients (33%) had distant metastatic disease at diagnosis as compared with older persons (10% [P = .01]).

disease supports a more aggressive course in these younger patients, which is consistent with prior case reports; delayed diagnosis also potentially could have contributed.

Here, we report that MCC can very rarely occur in young individuals. The extremely low rate of MCC in young people differs dramatically from the rate of invasive melanoma, which is approximately 11 times more common than MCC in elderly adults but more than 2000 times more common than MCC in individuals younger than 30 years (Fig 1). This discrepancy suggests that MCC and melanoma are

associated with different age-related risk factors beyond ultraviolet exposure alone. Furthermore, the lack of MCC in young individuals is not solely explained by Merkel cell polyomavirus (MCPyV) infection: population seroprevalence studies report that MCPyV infection usually occurs before the age of 5 years,⁵ and infections with the virologically similar human papillomavirus result in increased cancer incidence, with only a 10- to 20-year latency.⁶ Limitations of this study include absence of survival/outcomes information, inability to calculate adjusted incidence because of the small number of young cases, and lack of information in the NPCR SEER database regarding the MCC risk factors MCPyV⁷ and immunosuppression.⁸ Although MCC is only rarely diagnosed in individuals younger than 30 years (<1% of cases), it is more likely to have spread beyond the primary site at diagnosis in young patients, and consideration should be given to thorough staging, including cross-sectional imaging in such patients. Further research is needed to determine the reason(s) for the markedly pronounced relationship between age and MCC risk.

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Online communications among hidradenitis suppurativa patients reflect community needs



To the Editor: Patients with hidradenitis suppurativa (HS) often feel embarrassment and may avoid discussing symptoms with physicians, friends, and even family.¹ We studied communications in an online community focused on HS to identify trends.

A search for the term *hidradenitis suppurativa* on Facebook identified the closed Hidradenitis Suppurativa Support Group as the largest support group for individuals with HS, with 12,970 members at the start of the analysis. With permission from the group administrators, an institutional board review—approved retrospective assessment of posted content from 7 randomly selected days from 3 months (November 2017, December 2017, and January 2018) was performed. Posts were assessed for primary content and anonymously categorized. A total of 20 posts were reviewed by 2 investigators for agreement.

The majority of the 1036 messages from 703 unique users sought feedback from other users by requesting information (54%) (Table 1) and requesting social support (20%). Fewer inquired about other categories (Fig 1). Nine posts (0.87%) appear to have been made by family or friends, perhaps confirming the hidden nature of the disease.

Limitations include the fact that this group may not be representative of the general population of individuals with HS and the fact that there was no verification of diagnosis or severity of HS. Also, discussion topics may vary by season or news events.

The information exchanged on Facebook forums is not regulated by medical professionals, and some of the home remedies shared in this HS support group, such as dietary recommendations or use of laundry soap as topical treatment for skin lesions

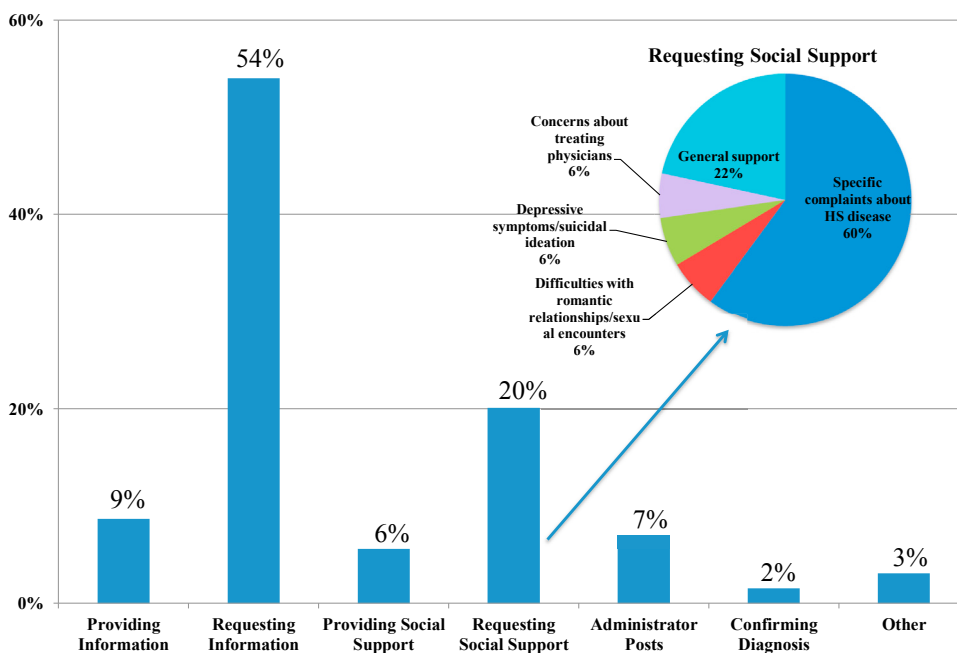


Fig 1. Categories of online posts. HS, Hidradenitis suppurativa.