SKIN

SHORT COMMUNICATION

A Retrospective Chart Review of Merkel Cell Carcinoma Demographics in Two Large Tertiary Centers in Southern California

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To the Editor: Merkel cell carcinoma (MCC) is an aggressive neuroendocrine skin cancer with high metastatic potential. Current literature suggests that it most commonly occurs in non-Hispanic White men with exponential increases in incidence at older ages.[1]While rare, there has been a 95% increase in the incidence of MCC in the United States between 2000 and 2013.[2] Our study aimed to investigate demographic trends in this rare malignancy and to better characterize its outcomes with a focus on health disparities. We conducted an institutional review board-approved retrospective study using data from 2000 to 2021 from two tertiary centers, Keck Hospital of University of Southern California and Los Angeles County + University of Southern California.

A total of 74 patients were included, with 47 (64%) male and 27 (36%) female patients. Median age at diagnosis was 69 years (interquartile range 58, 78). Of those who identified a race, 52 (80%) of the patients identified as White and 13 patients (20%) identified as other. Of those who identified an ethnicity, 13 (38%) were Hispanic/Latino while 21 (62%) were non-Hispanic/Latino. The majority of the patients had Medicare (31%) or HMO (35%) insurance types. The most common sites of primary tumor were the extremities (47%) and head (46%). 42 patients (58%) had a known metastasis. Of those patients, 9 (12%) had metastasis to the parotid gland, 40 (54%) had metastasis to the lymph node, and 4 (5.4%) had a distant metastasis. Of the 4 patients with distant metastasis, 2 of the primary tumors were located on the head and 2 were located on the trunk, but none in the extremities. There were 2 deaths in our cohort. The above baseline cohort information can be found in **Table 1**.

We stratified cases with any form of metastasis (parotid gland, lymph node, or distant metastasis) and compared them to cases without metastasis (**Table 2**). We found metastasis more commonly in males (p=0.05) and Hispanic/Latino patients compared to non-Hispanic/Latino patients (p=0.043). The two groups did not show any differences in insurance type or primary site of MCC.

Our data is consistent with prior studies that report a high rate of MCC metastasis to local

Table 1. Baseline Demographics.

Characteristic	N = 74
Median Age at Diagnosis	69 (58, 78)
Gender	
Male	47 (64%)
Female	27 (36%)
Race	
White	52 (80%)
Other	13 (20%)
Ethnicity	
Hispanic/Latino	13 (38%)
Non-Hispanic/Latino	21 (62%)
Insurance	
Medicare	23 (31%)
HMO	26 (35%)
PPO	10 (14%)
Medi-Cal	3 (4.1%)
Self-Pay	3 (4.1%)
Other	9 (12%)
Primary Location	
Extremity	32 (47%)
Head	31 (46%)
Trunk	5 (7.4%)
Parotid Metastases	9 (12%)
Lymph Node Metastases	40 (54%)
Distant Metastases, from a primary located in:	4 (5.4%)
Extremity	0 (0%)
Head	2 (50%)
Trunk	2 (50%)
Parotid/Lymph Node/Distant Metastases	43 (58%)
Deaths	2 (2.7%)

Table 2: Non-Metastatic Merkel Cell Carcinoma versus Metastatic Merkel Cell Carcinoma.

	No Metastasis (N = 31)	Metastasis Present (N = 42)	p-value
Age at Diagnosis	72 (63, 82)	63 (54, 75)	0.10
Gender			0.05
Male	16 (52%)	31 (74%)	
Female	15 (48%)	11 (26%)	
Ethnicity			0.043
Hispanic/Latino	2 (15%)	10 (50%)	
Non-Hispanic/Latino	11 (85%)	10 (50%)	
Insurance			0.10
Medicare	11 (35%)	12 (29%)	
HMO	10 (32%)	15 (36%)	
PPO	2 (6.5%)	8 (19%)	
Medi-Cal	0 (0%)	3 (7.1%)	
Self-Pay	1 (3.2%)	2 (4.8%)	
Other	7 (23%)	2 (4.8%)	
Primary Location			0.4
Extremity	14 (45%)	18 (50%)	
Head	16 (52%)	14 (39%)	
Trunk	1 (3.2%)	4 (11%)	

and distant lymph nodes[3], males being likely to present with more advanced stage MCC at initial diagnosis, and males also having a reduced overall survival in MCC compared to females.[1,4] Most notably, however, we observed a statistically significant increase in MCC metastasis in Hispanic/Latino patients compared to non-Hispanic/Latino patients. In existing literature, it is estimated that 96% of MCC cases occur in non-Hispanic Whites.[1] Possible prognostic factors that could explain this increase in the proportion of Hispanic/Latino patients in our findings include whether Hispanic/Latino patients present with more advanced disease stages at initial presentation and whether socioeconomic barriers play a role in these differences. While these prognostic factors were not available for investigation in our dataset, it would be of interest to the scientific community to conduct additional studies to investigate the role of these factors in greater detail.

Conflict of Interest Disclosures: None

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