

Table I. Cont'd

Institution	Location	Date established	Number of faculty	Funding	Research
Washington at St Louis Skin of Color and Inflammatory Dermatoses Clinic	St. Louis, MO	2019	1	Dermatology department, institution	Hidradenitis suppurativa, sarcoidosis, vitiligo, lichenoid dermatoses

AKN, Acne keloidalis nuchae; CCSA, central centrifugal scarring alopecia; SOC, skin of color; SOCS, Skin of Color Society; Nd:YAG, neodymium-doped yttrium aluminum garnet; NIH, National Institutes of Health; MKTP, melanocyte-keratinocyte transplantation procedure.

centers receive institutional, grant, and/or industry support. The Hampton University Skin of Color Research Institute, a nonclinical entity founded by Valerie Harvey, MD, and David McDaniel MD, investigates keloid scar pathogenesis and melanoma disparities. The Johns Hopkins Ethnic Skin Program performs clinical trials assessing novel laser therapies for keloid scars and central centrifugal cicatricial alopecia. The Skin of Color Center at Mt. Sinai St. Luke's researches safe cosmetic procedures for darker skin, an area of growing demand. Advocacy and education are also imperative, as evidenced by the Massachusetts General Hospital Pigmentary Disorder and Multi-Ethnic Skin Clinic publicizing the dangers of intravenous glutathione skin lightning via local news media. Several centers organize seminars at churches and hair salons to raise awareness of central centrifugal cicatricial alopecia and traction alopecia while teaching healthy skin care practices.

The Skin of Color Society, established in 2004, drives this movement by promoting awareness, furthering research, and providing education to 592 fellows, associate members, residents, and research fellows through grants, mentorship, and industry partnerships. Other supporting organizations include the American Academy of Dermatology Diversity Task Force and National Medical Association Dermatology Section. We recognize pioneers, including the Department of Dermatology at Howard University and others, as initial, exclusive sources of dermatologic care and research for marginalized minority communities. We must also acknowledge departments without established centers that are contributing to this work.

Ethnic skin centers have made significant strides. Nonetheless, centers must continue practicing culturally sensitive patient care; educating the medical community and public; and performing innovative, collaborative research to advance the knowledge and treatment of conditions prevalent in skin of color.

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Systematic retrospective study of 64 patients with anti-Mi2 dermatomyositis: A classic skin rash with a necrotizing myositis and high risk of malignancy



To the Editor: Dermatomyositis (DM) is an autoimmune myopathy associated with the presence of a specific skin rash and characteristic morphologic features, including perifascicular pathology without

Table I. Comparison of cutaneous, muscular, extracutaneous, and extramuscular manifestations of anti-Mi2⁺ and anti-Mi2⁻ patients

Features	Anti-Mi2 ⁺ DM, n (%) n = 64	Anti-Mi2 ⁻ DM, n (%) n = 55	Fisher's test, n (%) P value
Cutaneous features			
Alopecia	1/42 (2.4)	7/55 (12.7)	.13
Calcinosis cutis	1/56 (1.8)	6/55 (10.9)	.06
Panniculitis	2/42 (4.7)	3/55 (5.5)	>.99
Cutaneous ulceration	2/56 (3.6)	10/55 (18.2)	.02
Mechanic hands	6/56 (10.7)	7/55 (12.7)	.78
Heliotrope rash	41/64 (64.1)	34/55 (61.8)	.8
Gotttron papules/sign	38/53 (71.7)	21/55 (38.2)	.0005
Periungual erythema	36/56 (64.3)	25/55 (45.5)	.05
Holster sign	12/55 (21.8)	2/55 (3.6)	.008
Muscular features			
Myalgia	15/23 (65.2)	48/54 (89)	.02
Proximal weakness	61/64 (95.3)	49/55 (89.1)	.35
Severe weakness (MRC score, ≤3)	29/54 (53.7)	35/55 (66)	.02
Elevated CK level	58/64 (90.6)	46/55 (83.6)	.28
CK level (IU/L)*	3748 (1159-8799)	1680 (893-5818)	.23
Myopathic EMG	32/37 (86.5)	34/42 (81)	.56
Abnormal muscle MRI [†]	20/33 (62.5)	30/53 (56.6)	.87
T2 hypersignal	15/17 (88.2)	23/31 (74.2)	.46
T1 fat replacement	6/17 (35.3)	9/25 (36)	>.99
Extracutaneous and extramuscular features			
Raynaud phenomenon	8/63 (12.7)	12/54 (22.2)	.26
Arthritis/arthritis	17/63 (27)	23/55 (41.8)	.13
Dyspnea	1/10 (10)	31/52 (59.6)	.01
ILD	13/34 (38.2)	10/52 (19.2)	.08
FEV < 70%	2/11 (18.2)	9/47 (19.2)	>.99
FCV < 70%	1/24 (4.2)	7/46 (15.2)	.25
DLCOC < 70%	3/22 (13.6)	14/23 (60.9)	.002
Myositis specific antibodies	64/64 (100)	20/55 (36.4)	<.0001
Anti-Mi2	64/64 (100)	0/55 (0)	<.0001
Anti-MDA5	—	9/37 (24.32)	—
Anti-NXP2	—	3/31 (9.68)	—
Anti-SAE1/2	—	3/31 (9.68)	—
Anti-TIF1γ	—	5/32 (13.51)	—

DLCOC, Corrected carbon monoxide diffusion capacity; CK, creatine kinase; DM, dermatomyositis; EMG, electromyogram; FCV, forced vital capacity; FEV, forced expiratory volume; ILD, interstitial lung disease (defined on chest computed tomography scan); MRC, Medical Research Council; MRI, magnetic resonance imaging.

*The CK level values are presented as mean (range).

[†]Muscle MRI abnormalities are defined as sequence T1 inversion-recuperation or fat-saturated gadolinium-enhanced T2-weighted or gadolinium-enhanced T1-weighted hypersignals.

myofiber necrosis. However, the clinical and morphologic spectrum of DM remains heterogeneous. It is now recognized that DM-specific auto-antibodies are useful in defining more homogeneous subsets of patients with DM.¹ The anti-Mi2 antibody was discovered more than 40 years ago; nonetheless, few studies have described its phenotype, and these have included only a limited number of patients.² In this study, we aim to characterize the anti-Mi2 DM phenotype with a focus on the cutaneous and muscular features, including a myopathologic

description of the skeletal muscle biopsies, and evaluate its association with cancer.

This was an observational, multicenter study (16 medical centers) from July 2013 through January 2017. Anti-Mi2⁺ and anti-Mi2⁻ (control) patients with DM were included if they presented with (1) DM skin rash as defined by the European NeuroMuscular Center³ and/or Sontheimer⁴ criteria and (2) DM-specific antibodies (anti-Mi2, anti-NXP2, anti-MDA5, anti-TIF1γ, or anti-SAE) and/or myopathologic features of DM (for seronegative

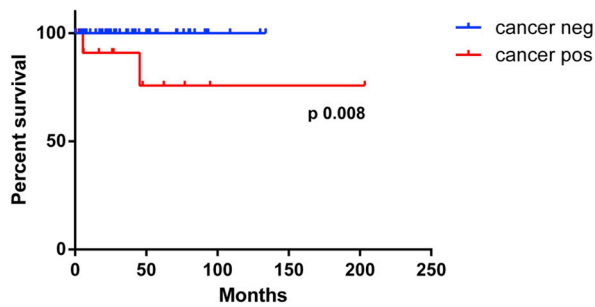


Fig 1. Survival curve in anti-Mi2⁺ patients with dermatomyositis with or without malignancy. *neg*, Negative; *pos*, positive.

patients) according to the European NeuroMuscular Center criteria.³ All muscle biopsy samples from the Pitié-Salpêtrière Hospital (anti-Mi2⁺ patients with DM, *n* = 20; control patients, *n* = 32) were reviewed.

Sixty-four anti-Mi2⁺ patients with DM were included. The median age at diagnosis was 55.5 years (first and fourth quartile, 38.1-65.8), and patients were mainly females (60.9%; *n* = 39/64). Comparison of features of anti-Mi2⁺ patients with DM and those of control patients (*n* = 55) is shown in Table I. Anti-Mi2⁺ patients with DM presented more frequently with a classic DM skin rash (including Gottron papules/sign and/or heliotrope rash and/or periungual erythema and/or violaceous rash including Holster sign) without additional skin changes such as calcinosis, ulcers, panniculitis, and/or mechanic hands (82.8% vs 45.3%; *P* = .0004) (Table I).

All anti-Mi2⁺ patients with DM except 1 (amyopathic) had proximal muscle weakness (Table I), and in more than half of these patients, muscle weakness was severe (Medical Research Council 5 scale, ≤3). Consistent with the presence of high creatine kinase levels (Table I), anti-Mi2⁺ patients with DM had increased myofiber necrosis (90% vs 26% in control patients; *P* < .0001) encountered in both the perifascicular and centrofascicular areas. A perifascicular atrophy was observed in all anti-Mi2⁺ patients with DM.

Compared with the age- and sex-matched expected cancer rate in the general French population, the anti-Mi2⁺ patients with DM had an increased risk of cancer, with a standardized incidence ratio of 5.1 (95% confidence interval [CI]: 3.0-8.6) (*P* < .001). The median time between DM diagnosis and malignancy diagnosis was 61.5 days [95% CI: -105.8 to 237.5]. All but 1 of the anti-Mi2⁺ patients with DM who had cancer-associated myositis were older than 50 years. Patients with

malignancy had a worse prognosis with higher mortality rate compared with patients without cancer (*P* = .008) (Fig 1).

Although patients with DM with anti-TIF1-γ, anti-MDA5, anti-SAE, and anti-NXP2 may display distinct cutaneous features in addition to the classic DM skin rash,⁵ we observed that anti-Mi2⁺ patients with DM present a classic DM skin rash more frequently. For the first time, to our knowledge, we showed that anti-Mi2⁺ patients with DM present extracutaneous characteristics, including a necrotizing myositis and an increased risk of malignancy. These findings strengthen the importance of DM-specific antibodies to delineate more homogeneous DM phenotypes.

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Local recurrence of clinically observed basal cell carcinomas following complete saucerization or punch removal with negative margins: Retrospective case series from 2010 to 2020



To the Editor: Clinically well-defined, smaller (<1 cm) basal cell carcinomas (BCCs) are often amenable to saucerization shave or punch biopsy with the intent of complete removal at diagnosis. Few studies have assessed whether narrow-margin complete biopsy with negative histopathologic margins may be sufficient treatment for lower-risk BCCs; limited data of mainly superficial BCCs tangentially shave biopsied with negative margins showed low (0.5%) recurrence.¹ Our retrospective analysis aimed to determine (1) local recurrence of completely biopsied BCCs with negative histopathologic margins on standard vertical breadloaf sectioning that were then clinically observed and (2) whether prebiopsy size, biopsy type, anatomic location, subtype, and histologic deep and peripheral margin measurement differed in recurrent versus nonrecurrent cases.

The cohort consisted of consecutive dermatology patients with clinically/dermoscopically characteristic BCCs who underwent attempted complete saucerization (to the mid-reticular dermis) or full-thickness punch removal with estimated 1- to 2-mm margins at the Veterans Affairs Palo Alto Health Care System from May 24, 2010, through December 31, 2017, and were followed for at least 1 year thereafter, with clinical follow-up through February 18, 2020. Biopsy intent (excisional versus partial) was

documented for all lesions, as was recurrence/nonrecurrence of each biopsy site at the last clinic follow-up visit. The study was approved by the institutional review boards at Stanford University Medical Center and Veterans Affairs Palo Alto Health Care System. Standard breadloaf sectioning was performed, along with additional processing of tip specimens for complete saucerizations, for more thorough margin assessment. A subset of specimens was reviewed by a dermatopathologist (EB) and dermatologist (SMS) to measure the narrowest deep and mean peripheral margins (to the right and left of the tumor), with the closest peripheral margin used for analysis. BCCs with stroma at the margins were considered narrowly excised and were coded as less than 0.1-mm margins. Partial/incomplete biopsies were excluded, as were cases treated with electrodesiccation and curettage, cryotherapy, topical 5-fluorouracil, or imiquimod cream after biopsy (n = 36) and those with less than 12 months of follow-up (n = 97). Differences between recurrent and nonrecurrent tumors were evaluated by chi-square test for categorical features, Student *t* test for age, and Wilcoxon's rank sum test for prebiopsy size and histologic margins. All tests were 2 sided; statistical significance was defined as *P* less than .05. Statistical analyses were performed with SAS, version 9.4 (SAS Institute Inc, Cary, NC).

Of 2739 BCCs identified in 327 patients (98% male; mean age, 72 years), 413 were intentionally completely biopsied (92% via saucerization) and had clear histologic margins; 14 BCCs (3.4%) recurred at a mean (standard deviation [SD]) follow-up of 51.4 (27) months, with a mean (SD) time to recurrence of 17 (9) months. Most tumors were nodular (68%) or superficial/early nodular (23%) subtype, with a median size of 6 mm (range, 1-27 mm). Recurrences were less common on the trunk/extremities (5/268; 1.9%) compared with the head/neck (9/145; 6.2%; *P* = .02) (Table I). Recurrent BCCs were treated as described in Table II. In 10 recurrent and 76 randomly selected nonrecurrent cases, histologic measurement of the mean (SD) closest peripheral margin was similar (1.7 [1.1] vs 1.2 [1.3] mm; *P* = .10); the same was true for the narrowest deep margins (0.5 [0.6] vs 0.6 [0.8] mm; *P* = .98).

Narrow-margin saucerization or punch removal of smaller (<1 cm) nodular BCCs on the trunk and extremities with clear histopathologic margins showed low recurrence, although this study is limited by follow-up time (mean, 51.4 months) and imprecise prebiopsy margin measurement. Likewise, our practice of documenting biopsy intent (incomplete vs complete removal), pathology sectioning for excisional saucerizations to include