Table II. Factors associated with positive pathologic margins on excision after matching for specialty and Brigham and Women's tumor staging system in multivariate logistic regression

Variable of interest	No. patients (%)	Odds ratio (95% confidence interval)	*P* value
Head and neck location			
Not head and neck	364 (78.8%)	1 [Reference]	.0005
Head and neck	98 (21.2%)	4.1 (1.8-9.2)	
Margin group			
Documented, appropriate	199 (43.1%)	1 [Reference]	.0005
Documented, inappropriate	95 (20.5%)	3.5 (0.6-19.2)	
Undocumented	168 (36.4%)	9.6 (2.1-42.7)	
Treatment status			
Primary	439 (95.2%)	1 [Reference]	.14
Recurrent	22 (4.8%)	2.5 (0.7-8.9)	

histologic margins were negative in 99.0% of cases reporting GCM. Most positive histologic margins (93.3%) were in cases in which surgical margins were not compliant with NCCN guidelines (n = 5) or not reported (n = 23).

Our data support the NCCN guidelines for surgical margins when treating cSCC with SSE. These findings emphasize the importance of following evidenced-based guidelines. When these guidelines are followed, there is a significantly lower rate of positive histologic margins (regardless of surgical specialty), and the need for re-excision is lowered.

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Hypopigmented macules in neurofibromatosis type 1: A case control study

To the Editor: Neurofibromatosis type 1 (NF1) is an autosomal dominant, neurocutaneous disorder. In most cases, cutaneous pigmentary manifestations are the main diagnostic clue. NF1 is characterized by hyperpigmentation—café au lait macules (CALMs), skinfold freckling, and melanotic plexiform neurofibromas. However, hypopigmented lesions have received little attention in patients with NF1. Riccardi[1] described the presence of hypopigmented macules (HMs) in approximately 2% to 3% of patients with NF1 in 1987. Studies regarding the physiopathology of HM in NF1 are lacking. This study aimed to characterize the prevalence of HMs in our pediatric patients diagnosed with NF1.

Table I. Demographic and clinical characteristics

Clinical features	Patients with NF1 (N = 108)	Control individuals (N = 137)
HMs, n (%)	15 (13.9)	6 (4.4)
Age when HMs first noticed, y		
Mean	4.2	4.7
Range	0-10	3-13
Sex, n (%)	$P = .132$	$P = 1$
Male	9 (60)	3 (50)
Female	6 (40)	3 (50)
Distribution		
Solitary, n (%)	12 (80)	6 (100)
Range	1-2	
Mean ± SD	1.2 ± 0.41	
Location, n (%)		
Thorax	6 (40)	3 (50)
Legs	5 (33.3)	1 (16.6)
Abdominal	3 (20)	0
Arms	2 (13.3)	1 (16.6)
Lumbar	1 (6.6)	1 (16.6)
Neck	1 (6.6)	0
Size, cm, n (%)		
<1	4 (22.2)	2 (33.3)
1-5	13 (72.2)	4 (66.6)
>5	1 (5.6)	0
Morphology, n (%)		
Ash-leaf	6 (33.3)	0
Rounded	5 (27.8)	3 (50)
Oval	5 (27.8)	3 (50)
Polygonal	2 (11.1)	0

HM, Hypopigmented macule; *SD*, standard deviation.

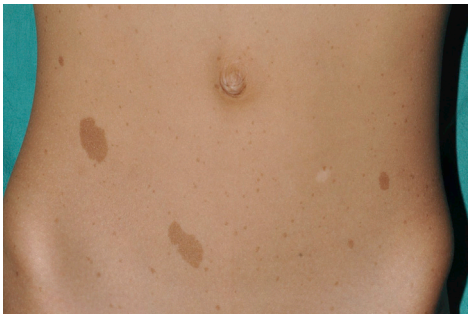

Fig 1. Congenital stable hypopigmented macule located on the abdominal area.

A case-control prospective study design was used to compare the prevalence of HMs in 108 patients diagnosed with NF1 (younger than 18 years) and 137 healthy age-matched control individuals. All patients included in the cases cohort had a confirmed diagnosis of NF1. We required a third National Institutes of Health criterion or genetic testing in children who exclusively showed CALMs and skinfold freckling. The patients were enrolled from October 2014 to January 2017. We also assessed the number, location, size, and morphology of HMs in our patients.

Well-circumscribed lesions, those with early onset in life, and stable hypomelanosis were considered HMs. Patients with postinflammatory hypomelanosis and other possible causes of hypopigmentation as well as vitiligo or nevus anemicus (NA) were excluded. All HMs became erythematous after rubbing, unlike NA. All participants signed informed consent.

We observed that 13.9% (n = 15) of patients showed HMs. In the control group 4.4% (n = 6) children presented with HMs. The prevalence of HMs in the cases group was significantly higher than in the control group (Pearson chi-square test P value = .008).

Demographic and clinical characteristics are shown in Table I. The HM sizes ranged from 0.5 to 9 cm, and all presented with well-defined or sharp margins (Fig 1 and Supplemental Fig 1; available via Mendeley at https://doi.org/10.17632/6w3g76nyxr.2). Parents recalled the presence of HMs from birth in 4 (22.2%) children.

Although CALMs are present in almost all patients with NF1, the prevalence of circumscribed hypomelanosis has not been characterized. The differential diagnosis for HMs included tuberous sclerosis complex (TSC) hypomelanotic macules, NA, vitiligo, pityriasis alba, postinflammatory hypopigmentation, and piebaldism. The simultaneous occurrence of NF1 and TSC in a single individual is extremely rare,[2] and our patients did not show other signs of TSC.

The HMs observed in patients with NF1 fulfilled the Coupe clinical diagnostic criteria and could be considered nevus depigmentosus (ND).[3,4] ND is the best characterized congenital, stable throughout life, well-circumscribed hypopigmented lesion.[3] ND occurs in approximately 0.4% to 0.7% of infants,[5] so the HM prevalence in our series (13.9%) was higher than expected. Thus, our results suggest a statistical relationship between NF1 and HMs ($P < .008$). However, the pathophysiologic explanation of the higher prevalence of HMs in the NF1 population remains unknown. We conclude that HMs are a common finding in NF1. This finding could be either a coincidence or truly associated with NF1. Basic research investigations are needed to achieve a better knowledge of HM physiopathology.

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This study is included in the doctoral thesis entitled "Clinical and ultrasonographic study of the neurofibromatosis type 1 in a pediatric population" (https://www.educacion.gob.es/teseo/irGestionarConsulta.do). This study was also presented at the 75th American Academy of Dermatology Annual Meeting, Orlando, FL, March 3-7, 2017, as an e-poster under the title "Hypopigmented Macules: A Common Finding in Neurofibromatosis Type 1."

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A retrospective review of incidental malignancies in veterans seen for face-to-face follow-up after teledermatology consultation

To the Editor: Teledermatology (TD) is a rapidly growing tool within dermatology. However, few studies have evaluated malignancies missed by a referring provider but subsequently found by live in-person dermatologic examination when the initial consult is through teledermatology.[1]

This retrospective chart review was approved for a category 4 exception and waiver status by the University of Wisconsin Health Sciences and the Madison Veterans Affairs institutional review board. Lesion and biographical data were extracted from consult notes and pathology reports. The referrals by nondermatologists represent "index lesions" that were either suspected to be malignant or required further evaluation by a dermatologist. Incidental lesions were any additional found on face-to-face (FTF) skin examination. Statistical analysis was conducted on samples that were obtained when a patient underwent a full-body skin examination (FBSE) within 1 year of the original TD consult. Sample sizes were calculated using positive biopsy results (melanoma and nonmelanoma skin cancer) as the outcome variable.

Of the total 2874 TD consults seen between June 1, 2014, and December 31, 2018, 1,097 (38.1%) required an FTF follow-up with a dermatologist. Of these, 199 patients out of 1097 (18.1%) required biopsy of 1 or more incidental lesions. A total of 295 incidental lesion biopsies were performed on 199 patients, and 171 were found to be malignant (58.0%) (Table I). The most common malignant incidental lesion was basal cell carcinoma (61.4%), squamous cell carcinoma (28.7%), melanoma (5.3%), and dysplastic nevi requiring reexcision (4.8%) (Table II). Malignant lesions were associated with older age and history of nonmelanoma skin cancer compared with benign lesions (Table II).

Without an FBSE provided by a dermatologist, malignancies would have been missed in 15.6% of patients. This is higher than the 3.6% found in a TD referral system and the 6.9% and 15.3% found in non-TD referral systems.[1-3]

Nine of the 31 melanomas detected during the study period were discovered incidentally. The rate of incidental melanoma detection was 9 of 1097 (0.8%), which is consistent with previously reported detection rates from non-TD studies (0.5%-1.5%).[3-5]

Our findings show that the FTF visit after a TD consult resulted in an increased rate of detection of incidental malignancies compared to a standard dermatology referral. There is concern that TD may result in missed skin malignancies, however with appropriate triage via TD, patients with urgent needs are brought in sooner for a FBSE. This increases access for those who are truly at higher risk.

The limitations to this study include its retrospective nature and a predominantly elderly, white, male demographic. Furthermore, there is no direct comparison with a similar matched