

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. discrimination. No differences were detected on the midfrontal or occipital scalp.

We believe our study is the first to find an association between scalp neuropathy and AGA. Scalp neuropathy might manifest as autonomic neuropathy and peripheral neuropathy, as autonomic neuropathy hypothesis is consistent with the fact that disruption of the autonomic nervous system in leprosy triggers localized alopecia.³

One limitation of our study was the small sample size. Our threshold for neuropathy was lower than what is typically used for diabetic peripheral neuropathy, as diabetic peripheral neuropathy is generally assessed on the foot. Our study shows association rather than cause and effect. Other factors like ultraviolet radiation—induced nerve damage might be contributory. If validated in a larger cohort, scalp AGA may be related to scalp neuropathy.

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Conflicts of interest

None disclosed.

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Asynchronous telemedicine for isotretinoin management: A direct care pilot



To the Editor: During the COVID-19 pandemic, telemedicine has sustained health care^{1,2} and will

remain an integral aspect of care delivery. However, synchronous telemedicine (ST) requires providerpatient co-availability and fails to address the capacity constraints of our specialty. Asynchronous telemedicine (AT), on the other hand, may enhance access^{3,4} by allowing more routine care to be delivered in a scalable fashion. This method would free in-person and synchronous telemedicine appointments for urgent, higher-value dermatologic care.

We piloted a direct-care AT program for isotretinoin management in established acne patients at our urban, academic dermatology clinic. Patients upload photographs and complete an online structured questionnaire through а non-electronic medical record (EMR)-based web portal accessible on any internet-enabled device. The physician uses the same portal to respond asynchronously, and the final AT note is ported into the EMR. Although physicians may theoretically hesitate to remotely adjust isotretinoin dosing without a synchronous visit, we hypothesized that in practice, there would be no difference in dosing outcomes between AT and ST groups. Between March 1 and May 7, 2020, 126 patients completed 182 isotretinoin AT visits, which we retrospectively compared with ST visits from the same period (Tables I and II). Analysis was conducted in Stata 15.1 (StataCorp, LLC-College Station, TX).

We developed the AT program prepandemic to offset access constraints to our clinic and targeted isotretinoin patients because they require frequent office visits. The pandemic prompted us to rapidly enroll many isotretinoin patients into AT during clinic closures. Most isotretinoin AT visits (77.5%) were completed successfully without conversion to ST visits. We investigated clinician behavior by using dose adjustments as a proxy for clinician comfort with asynchronous care delivery. Isotretinoin AT visits encompassed the full spectrum of therapy from start to finish, and dosing outcomes were not different between AT and ST groups. Importantly, dosing outcomes were also not different between AT-only and AT-converted-to-ST groups, meaning these conversions were not prompted by dosing adjustments. Taken together, these results suggest that dermatologists were comfortable remotely adjusting isotretinoin dosing (both escalating for therapeutic effect and decreasing to manage side effects) without a synchronous encounter. Another benefit of the isotretinoin AT program was alignment of screening pregnancy test with the clinical encounter. During the pandemic, iPledge (https://www.ipledgeprogram.com/iPledgeUI/home.u) allowed home pregnancy tests, which facilitated

	AT*	ST [†]	
	N = 126	N = 17	
Age (y) [‡]			
Mean (SD)	21.7 (5.8)	28.1 (16.2)	
Median	21	21	
Gender			
Female	79 (62.7%)	10 (58.8%)	
Male	47 (37.3%)	7 (41.2%)	
Race			
Asian	8 (6.3%)	1 (5.9%)	
Black	3 (2.4%)	0	
Mixed race	2 (1.6%)	0	
Other/unavailable [§]	14 (11.1%)	3 (17.6%)	
White	99 (78.6%)	13 (76.5%)	
Ethnicity			
Non-Hispanic	101 (80.2%)	10 (58.9%)	
Hispanic or Latino	12 (9.5%)	1 (5.9%)	
Unavailable	13 (10.3%)	6 (35.3%)	
Insurance			
Commercial/private	107 (84.9%)	12 (70.6%)	
Government	19 (15.1%)	5 (29.4%)	
Month completed at enrollment			
Range	0-10 mo	0-17 mo	
Median	3 mo	3 mo	
Months in program			
1	68 (54.0%)	12 (70.6%)	
2	57 (45.2%)	5 (29.4%)	
3	1 (0.8%)	0 (0%)	
Days to AT visit completion			
By patient	0.9 \pm 1.7 (median 0)	N/A	
By MD	1.2 ± 1.5 (median 1.0)	N/A	

Table I. Demographics for patients starting inisotretinoin asynchronous versus synchronoustelemedicine visit

*Most AT visits (n = 179; 87.7%) were completed by 5 providers. [†]ST group were those patients scheduled directly for phone visit without enrollment in AT visit during the same period March 1 to May 7, 2020. (At our institution, most ST visits were conducted as phone visit accompanied by patient-submitted photographs).

[‡]Age difference between patients in AT and ST visits (P = .123; t test, unequal variance, 2-tailed).

 $^{\$}$ Race listed in medical record as Other, Unavailable, and Declined. $^{\|}$ Includes Declined and Other.

program compliance. This highlights the usual administrative burden iPledge imposes on patients and clinical practices, and a broader isotretinoin telemedicine system may overcome iPledge hurdles.

Our AT program was funded internally without insurance billing, and we recognize that lack of reimbursement for AT remains the greatest barrier to broader utilization.⁵ However, the trend in telemedicine reimbursement may eventually allow coverage for AT encounters that replace office visits. Further studies

Table II. Dose outcomes for isotretinoin AT versus ST* visits

	Overall	AT only	ST only	
	N = 204	N = 141	N = 63	P value
1 st or 2 nd HCG, Start	18	13	5	.611‡
Same	129	88	41	
Increase	33	23	10	
Decrease, stop [†]	11	6	5	
Finish	13	11	2	
	AT	AT only	AT with	P value
	overall		Phone	
	N = 182	N = 141	N = 41	
1 st or 2 nd HCG, Start	15	13	2	.239 [‡]
Same	116	88	28	
Increase	27	23	4	
Decrease, stop [†]	11	6	5	
Finish	13	11	2	

*ST = phone visit (n = 22) plus asynchronous visit converted to phone visit (n = 41).

[†]Stop means isotretinoin stopped before course complete (n = 1). [‡] χ^2 test for homogeneity (2-tailed).

of the asynchronous care model will inform utility of AT for routine follow-up and even triage across a spectrum of conditions. We urge our colleagues to continue practicing teledermatology and consider incorporating AT to improve patient access and clinical productivity. These efforts will keep our specialty poised at the leading edge of health care delivery.

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Conflicts of interest

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Mapping cutaneous T-cell lymphoma in the state of Florida: A retrospective exploratory spatial analysis of incidence patterns

To the Editor: Cutaneous T-cell lymphoma (CTCL) is a class of non-Hodgkin lymphoma that comprises approximately 75% of cutaneous lymphomas and is largely represented by 2 subtypes, mycosis fungoides and Sézary syndrome. The age-adjusted incidence of CTCL increased since the 1970s from 2.8 cases per million people in 1973 up to 7.7 cases per million people in 2005, when it appears to have stabilized.¹ Whether these increases represent a true change in the incidence rate or represent an artifact of enhanced clinician knowledge regarding the disease entity and reporting requirements is unclear. In the state of Florida, little has been formally reported regarding CTCL incidence. Our study seeks to describe incidence and demographic features of patients in Florida with CTCL while generating hypotheses for future research into etiologic factors.

A retrospective analysis of the Florida Cancer Data System Registry, a statewide cancer registry, and the Moffitt Cancer Center (MCC) was conducted from 1981 to 2015. Spatial profiles and incidence rates were developed after simultaneous adjustment for age, sex, and race, the combination of which has not been done in prior studies in other states, to our knowledge.²⁻⁴ Counties with a higher or lower incidence than the state were investigated using Department of Health reports to posit potential environmental reasons. Full methodologies are detailed in the Supplemental Material (available via Mendeley at https://doi.org/10. 17632/mbn87ggmb3.1).

Overall, 2785 patients (58% men) with CTCL were identified; of these, 87% were White and 10% were Black. Case composition was 55% mycosis

Table I. Descriptive statistics for Florida Cancer
Data System (FCDS) Registry and Moffitt Cancer
Center (MCC) Data for all periods

	Patients, No. (%)			
	FCDS	мсс		
Characteristic	(n = 2785)	(n = 468)		
Sex				
Male	1602 (57.5)	259 (55.3)		
Female	1180 (42.4)	209 (44.7)		
Missing	47 (1.69)			
Age, y				
0-19	19 (0.7)	1 (0.2)		
20-64	1197 (43.0)	174 (37.2)		
≥65	1569 (56.3)	293 (62.6)		
Race				
White	2418 (86.8)	389 (83.1)		
Black	282 (10.1)	53 (11.3)		
Other	39 (1.4)	20 (4.3)		
Missing	46 (1.65)	6 (1.3)		
Subtype				
CTCL-NOS	989 (35.5)	14 (3.0)		
Sézary syndrome	71 (2.55)	44 (9.4)		
Mycosis fungoides	1523 (54.7)	336 (71.8)		
pcCD30 ⁺ LD	202 (7.25)	47 (10)		
scPLTCL		1 (0.2)		
pcGDTCL		2 (0.4)		
CD4 ⁺ SMLPD		21 (4.5)		
Lymphomatoid papulosis		3 (6.4)		
Payer type				
Medicare	1039 (37.3)			
Insurance NOS	801 (28.8)			
Medicaid	79 (2.84)			
Uninsured/self-pay	52 (1.87)			
TRICARE/military/	37 (1.33)			
VA/Indian PHS				
Missing	777 (27.9)			
Marital status				
Married/living together	1752 (62.9)			
Single/separated/	875 (31.4)			
divorced/widowed				
Missing	158 (5.67)			
Smoking status				
Never used	980 (35.2)			
Current user	302 (10.8)			
Former user	626 (22.46)			
Not stated	774 (27.8)			
Missing	103 (3.70)			
HIV status				
Positive		1 (0.2)		
Negative		277 (59.2)		
Missing		197 (42.1)		

CTCL, Cutaneous T-cell lymphoma; *LBCD*, large B-cell diffuse; *No.*, number; *NOS*, not otherwise specified; *pcCD30*⁺ *LD*, primary cutaneous CD30-positive lymphoproliferative disorders; *pcGDTCL*, primary cutaneous gamma-delta T-cell lymphoma; *PHS*, Public Health Service; *scPLTCL*, subcutaneous panniculitis-like T-cell lymphoma; *SMLPD*, small/medium T-cell lymphoproliferative disorder; *VA*, Veterans Affairs.