

**Table I.** Overall and sex-stratified risk of developing subsequent melanoma or nonepithelial skin cancer in patients with primary Merkel cell carcinoma over time

Interval between MCC and subsequent skin cancer	O:E overall (95% CI)	O:E months 2-11 (95% CI)	O:E months 12-59 (95% CI)	O:E months 60-119 (95% CI)	O:E months 120+ (95% CI)
Melanoma	2.26 (1.77-2.85)	3.19 (1.86-5.11)	2.04 (1.38-2.92)	2.25 (1.36-3.52)	1.84 (0.74-3.80)
Male	2.50 (1.92-3.21)	2.12 (0.97-4.02)	2.46 (1.63-3.55)	2.83 (1.68-4.48)	2.51 (1.01-5.18)
Female	1.47 (0.73-2.63)	7.41 (3.20-14.61)	0.61 (0.07-2.19)	0.48 (0.01-2.67)	0 (0.00-3.65)
Non-epithelial skin cancer*	26.65 (21.80-32.26)	33.29 (20.86-50.40)	29.53 (22.12-38.62)	24.34 (15.75-35.93)	10.94 (3.55-25.52)
Male	24.16 (18.91-30.43)	26.94 (14.73-25.20)	29.25 (20.90-39.83)	19.75 (11.05-32.58)	9.00 (1.86-26.30)
Female	34.37 (23.66-48.27)	56.67 (24.47-111.67)	30.41 (16.19-52.00)	37.36 (17.91-68.70)	16.16 (1.96-58.37)

Values in parentheses represent 95% confidence intervals.

CI, Confidence interval; O:E, observed to expected ratio.

\*Non-epithelial skin cancers included sebaceous gland tumors, sweat gland tumors, dermatofibrosarcoma protuberans and Kaposi sarcoma but not cutaneous lymphomas.

may be beneficial in this patient population with consideration for non-MCC cutaneous malignancies. Further studies to determine whether the elevated risk of future melanoma or NESC segregates with Merkel cell polyomavirus status may help to target long-term screening efforts.

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**Conflicts of interest**

None disclosed.

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- Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER\*Stat Database: Incidence - SEER Research Data, 17 Registries, Nov 2021 Sub (1975-2019) - Linked To County Attributes - Time Dependent (1990-2019) Income/Rurality, 1969-2020 Counties, National Cancer Institute, DCCPS, Surveillance Research Program, released April 2, based on the November 2021 submission.

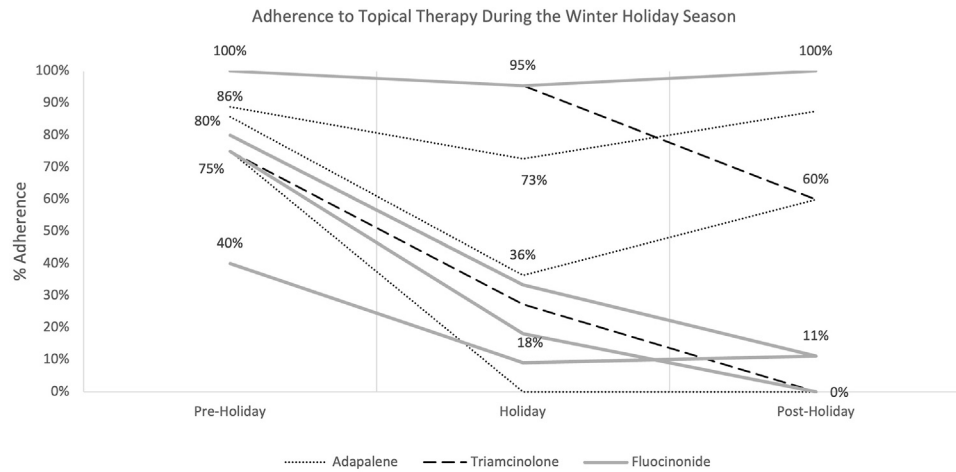
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**Holiday holidays: A reduction in topical medication adherence during the winter holidays**



*To the Editor:* Taking medication regularly can be a habit.<sup>1</sup> Holidays may alter patients' daily routines, disrupting medication adherence habits. We examined adherence to topical therapy before, during, and after a holiday in a small series of patients to assess whether holidays appear to disrupt patients' topical treatment adherence habits.

Adults with acne vulgaris ( $n = 4$ ), atopic dermatitis ( $n = 3$ ), and psoriasis ( $n = 4$ ) were recruited from Atrium Health Wake Forest Baptist's dermatology clinic in December 2022, and were given adapalene 0.1% gel, triamcinolone 0.01% ointment, and fluocinonide 0.05% ointment, respectively. Each medication tube was outfitted with an electronic monitoring cap (MyAide by Sensal Health) that



**Fig 1.** Each line denotes a subject’s adherence to topical treatment during the preholiday, holiday, and postholiday period. Adherence was highest in the preholiday period and declined during the holiday and postholiday periods.

**Table I.** Adherence to prescribed dose amounts

Cap number	Prescribed amount (FTU)	Preholiday period		Holiday period		Postholiday	
		Doses taken (n)	Amount adherence (%)	Doses taken (n)	Amount adherence (%)	Doses taken (n)	Amount adherence (%)
Cap 1	0.25	8	<b>50</b>	8	<b>13</b>	7	<b>29</b>
Cap 2	0.25	6	<b>0</b>	4	<b>50</b>	3	<b>33</b>
Cap 3	0.25	6	<b>67</b>	0	-	0	-
Cap 4	1.00	17	<b>24</b>	21	<b>0</b>	9	<b>11</b>
Cap 5	0.50	3	<b>100</b>	3	<b>100</b>	0	-
Cap 6	0.75	7	<b>57</b>	21	<b>57</b>	18	<b>56</b>
Cap 7	0.75	2	<b>0</b>	1	<b>0</b>	1	<b>0</b>
Cap 8	2.00	3	<b>0</b>	2	<b>0</b>	0	-
Cap 9	1.50	4	<b>0</b>	4	<b>25</b>	1	<b>0</b>

Subjects were prescribed varying amounts of topical medication, ranging from 0.25 FTUs to 2.00 FTUs. “Doses taken” denotes the number of times the subjects used the medication during each period. Bold values indicates the “Amount adherence” which denotes the percentage of doses taken during the specified period that fell within 60% to 175% of the initial prescribed amount. “-” indicate that no doses were taken during the specified period; thus, no doses could be interpreted as being an “adherent” or “non-adherent quantity.” Suboptimal quantities of medication were used across all study periods.

recorded each time the cap was removed from the medication tube and the weight of medication dispensed.<sup>2</sup> Subjects were instructed to use the medication daily. The preholiday, holiday, and post-holiday periods were defined as December 14 – December 22, December 23 – January 2, and January 3 – January 11, respectively. Medication weights were converted to fingertip units (FTUs), with 1 FTU = 0.50 gram (g).

At the conclusion of the study, overall adherence to prescribed doses was determined by dividing the number of doses taken by the number of doses prescribed × 100. Adherence to the amount of medication dispensed was denoted as amount adherent if the amount dispensed for a given dose fell within 60% to 175% of the prescribed amount. Possible adherence scores for overall and amount

adherence ranged from 0% to 100%, with higher scores indicating greater adherence. Descriptive statistics and paired *t*-tests were conducted using SPSS version 29.0. Two subjects were excluded due to cap user errors and technical failures.

Patients were a mean age of 46; 67% were female, 56% identified as White, 56% had an associate degree or some college, and 56% had private health insurance. The mean overall adherence scores during the preholiday, holiday, and postholiday periods were 80.0%, 42.9%, and 36.7%, respectively (Fig 1). The mean difference between the preholiday and holiday overall adherence scores was 37.1% (*P* = .002). The mean difference between the preholiday and postholiday overall adherence scores was 43.3% (*P* = .003). The mean adherence to the prescribed dose during the preholiday, holiday, and

postholiday periods were 34.3%, 30.9%, and 13.2%, respectively (Table 1); these differences were not statistically significant.

Adherence to topical therapy declined during the holiday and postholiday periods. Subjects used sub-optimal amounts of medication throughout the study. This study was limited by a very small sample; however, the reduction in adherence was so large that differences in overall adherence were detectable. Another potential cause for the decline in adherence could be the tendency for adherence to decline over time, particularly following an office appointment.<sup>3</sup> Patient-reported reasons for the decline were not collected but could have provided actionable targets to avoid habit decay and improve medication use during and after holidays.

Poor adherence to topical treatment compromises treatment outcomes. Additional support during the holidays—such as encouragement to maintain pre-holiday habits, electronic reminders, or expected contact with the health care professional shortly after the holiday—may help promote better treatment.<sup>4</sup>

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*with the understanding that this information may be publicly available.*

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#### Conflicts of interest

Feldman has received research, speaking and/or consulting support from Eli Lilly and Company, GlaxoSmithKline/Stiefel, AbbVie, Janssen, Alovtech, vTv Therapeutics, Bristol-Myers Squibb, Samsung, Pfizer, Boehringer Ingelheim, Amgen, Dermavant, Arcutis, Novartis, Novan, UCB, Helsinn, Sun Pharma, Almirall, Galderma, Leo Pharma, Mylan, Celgene, Ortho Dermatology, Menlo, Merck & Co, Qurient, Forte, Arena, Biocon, Accordant, Argenx, Sanofi, Regeneron, the National Biological Corporation, Caremark, Teladoc, BMS, Ono, Microes, Eurofins, Informa, UpToDate and the National Psoriasis Foundation. He is founder and part owner of Causa Research and holds stock in Sensal Health. Subramanian and Sirdeshmukh also hold stock in Sensal Health. Kontzias, Patel, Prajapati, and Chandu have no conflicts to disclose.

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<https://doi.org/10.1016/j.jaad.2023.06.050>

#### Isotretinoin for the management of moderate-to-severe seborrheic dermatitis: A systematic review



*To the Editor: Seborrheic dermatitis (SD) is a chronic inflammatory dermatosis characterized by erythema and scaling in areas of high sebaceous gland*