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.

Limitations include lack of a repeated interrater variability assessment, missed or incomplete data (see Supplemental material), and use of hair texture classification (versus geometric).[5] No statistically significant differences in the mean number of hairs removed between raters was appreciated in 2017.[1]

This study adds essential data to ensure all patient groups have consistent interpretation of a hair-pull test. This clinical update proposes a normal hair-pull test result range of less than or equal to 2 hairs for all hair textures and demonstrates that hair-care practices (eg, shampooing, hair brushing) can occur any time pretest. If more than 2 hairs are pulled, further investigation is warranted.

We would like to thank the Toronto hair salons that participated in this study: N15 Hair Salon, Jazma Hair Inc, and Onyx Barbers Inc. We would not have been able to obtain adequate participant numbers without their support.

Katherine Ann McDonald, MD,[a] Amanda Jane Shelley, MD,[a] Khalad Maliyar, BA,[b] Tasnim Abdalla, BHSc,[b] Renée A. Beach, MD, FRCPC,[a,b,c] and Jennifer Beecker, MD, CCFP(EM), FRCPC, FAAD[d,e,f,g]

From the Division of Dermatology[a] and Faculty of Medicine,[b] University of Toronto, Ontario, Canada; Women's College Hospital, Toronto, Ontario, Canada[c]; Division of Dermatology, University of Ottawa, Ontario, Canada[d]; The Ottawa Hospital, Ontario, Canada[e]; Ottawa Research Institute, Ontario, Canada[f]; and Probity Medical Research Inc., Waterloo, Ontario, Canada.[g]

Drs McDonald and Shelley are cofirst authors.

Drs Beach and Beecker are coprincipal investigators.

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Correspondence to: Katherine Ann McDonald, MD, RKS Dermatology Centre, Women's College Hospital, 76 Grenville St, Toronto, ON, Canada M5S 1B2

E-mail: kmcdo026@uottawa.ca

Conflicts of interest

None disclosed.

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Ultra-hypofractionated low-dose total skin electron beam followed by maintenance therapy: Preliminary findings from a prospective open-label study

To the Editor: low-dose total skin electron beam therapy (LD-TSEBT) with 12 Gy in 8 fractions is a reasonable approach for mycosis fungoides (MF) and Sezary syndrome (SS).[1] Prior studies show that LD-TSEBT improves cutaneous manifestations and health-related quality of life (HRQL).[2,3] Hypofractionated TSEBT regimens seem to be a feasible alternative to conventional fractionation.[4] Accordingly, the International Lymphoma Radiation Oncology Group recommends ultra-hypofractionated LD-TSEBT as a compelling option during the COVID-19 pandemic to decrease therapy duration and any possible exposure to COVID-19.[5]

In this prospective study, we present the feasibility of ultra-hypofractionated LD-TSEBT. Seven radiation courses were administered to 7 patients with MF/SS at our radiation oncology department at the university hospital Münster during the initial phase of COVID-19 pandemic from April to July 2020 (Table I). Patients underwent TSEBT with two 4 Gy fractions. Patients with thicker tumors or pathologically enlarged lymph nodes at the treatment time received additional focal radiotherapy. Treatment characteristics, modified skin-weighted severity (mSWAT), Skindex-29 questionnaire, and toxicity profiles were analyzed.

In this cohort study, the median mSWAT score before the LD-TSEBT was 46. Three patients received concomitant oral retinoid therapy. Moreover, all patients received maintenance treatment after irradiation. The median follow-up

Table I. Patient characteristics

Patient	Gender/ age (y)	Type/ stage	TSEBT dose	Additional focal radiotherapy	Prior therapies	Concurrent therapy	Maintenance therapies	Acute toxicities D1-W6	Subacute toxicities W8-W12	Response	mSWAT D1/W8	PFS (W)	Follow-up
1	M/69	SS	2 × 4 Gy	None	PUVA, INF, ECP, MTX, CST, 12 Gy TSEBT	None	Bexarotene	Edema, erythema, and nail atrophy grade 2	Edema and alopecia grade 1	PR	112/13	36	ANEP
2	M/66	MF/IIB	2 × 4 Gy	Tumors and lymph nodes	brentuximab, 2 x 12 Gy TSEBT	None	Mogamulizumab	Sepsis, alopecia grade 1, and nausea grade 1	Nail changes and alopecia grade 1	PR	31/4	26	Dead (due to COVID-19)
3	M/78	MF/IIB	2 × 4 Gy	Tumors	PUVA	Bexarotene	Bexarotene	Edema, erythema grade, alopecia, and blistering grade 1	Alopecia grade 1	PR	59/16	26	ANEP
4	F/77	SS	2 × 4 Gy	Lymph nodes	MTX, acitretin, bexarotene, ECP	None	Bexarotene, ECP	Erythema grade 2, edema grade 2, alopecia grade 1	Fatigue, nail changes, and alopecia grade 1	PR	100/37	31	ANEP
5	M/60	MF/IIB	2 × 4 Gy	None	PUVA, MTX, SCT, INF, brentuximab, bexarotene	Bexarotene	Bexarotene	Erythema and fatigue grade 1	Fatigue, and edema grade 1	PR	46/5	28	ANEP
6	F/55	MF/IIB	2 × 4 Gy	None	IFN, bexarotene, PUVA, gemcitabin	Acitretin	Acitretin	Fatigue, Erythema, and blistering grade 1	None	CR	9/0	28	ANEP
7	M/57	MF/IIB	2 × 4 Gy	Tumors	MTX, 12 Gy TSEBT, PUVA	None	Methotrexate	Erythema grade 2	Fatigue, alopecia, and blistering grade 1	PR	28/14	15	Progressed after 15 weeks

ANEP, Alive with no evidence of progression; *CR*, complete response; *CST*, corticosteroids; *D*, day; *ECP*, extracorporeal photophoresis; *INF*, interferon; *MF*, mycosis fungoides; *MTX*, methotrexate; *PFS*, progression-free survival; *PR*, partial remission; *PUVA*, psoralen plus ultraviolet A; *SCT*, stem cell transplantation; *SS*, Sézary syndrome; *TSEBT*, total skin electron beam therapy; *W*, week.

duration was 28 weeks. All patients experienced a clinical response with a median mSWAT reduction to 13. Among 5 patients with pruritus (median, 7), a substantial benefit was seen 8 weeks after LD-TSEBT, with a median score of 0. A marked decline in the global Skindex-29 score has been observed regarding patients' quality of life after 8 weeks of therapy with a clinically meaningful difference in the symptoms and emotional subscales.

During ultra-hypofractionated LD-TSEBT, all of the patients encountered mild toxicities (Table I). Four patients had grade 1 toxicities, whereas three patients exhibited grade 2 toxicities. The most common adverse effects were erythema, followed by edema. One patient, who had a thick ulcerated lesion, had sepsis during the treatment course and was successfully treated with antibiotics. After 8 weeks, all grade 2 adverse events were resolved. No patients had grade 4 to 5 adverse events.

In this research letter, we report the acute and subacute toxicities after LD-TSEBT with two 4-Gy fractions. Long-term outcome and toxicities need to be investigated in a subsequent report.

Our preliminary results showed that ultra-hypofractionated LD-TSEBT is a safe and feasible alternative to conventionally fractionated TSEBT for patients with MF/SS to reduce the overall therapy duration and possible COVID-19 exposure. The mSWAT scores and the HRQL recovered after ultra-hypofractionated LD-TSEBT. A detailed HRQL analysis using several instruments and the possible role of oral retinoids as a maintenance treatment after TSEBT are under development by our cutaneous lymphoma group and is supposed to help clinicians find the suitable fractionation regimen and maintenance therapies for MF/SS patients.

Daniel Rolf, MD, Khaled Elsayad, MD, and Hans Theodor Eich, PhD, Prof.

From the Department of Radiation Oncology, University Hospital of Muenster, Muenster, Germany.

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Correspondence to: Khaled Elsayad, MD, Department of Radiation Oncology, University Hospital of Muenster, Building A1, 1 Albert Schweitzer Campus, Muenster D48149, Germany.

E-mail: Khaled.elsayad@uni-muenster.de

Conflict of interest

None disclosed.

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Molecular characterization and natural history of linear porokeratosis: A case series

To the Editor: Porokeratoses are heterogeneous mosaic keratinization disorders associated with mutations in genes of the mevalonate pathway or connexin 26.

Here, we used immunohistochemistry and genetic testing by whole-exome or Sanger sequencing to characterize 6 patients with linear porokeratosis, all having negative family history for porokeratosis (Table I).

Histopathologically, cornoid lamellae were present in 5 patients. In 2 cases, the proximity to eccrine gland ducts led to misinterpretation of the diagnosis, which was clarified by genetic testing. Porokeratosis was accompanied by increased proliferation of basal keratinocytes without evidence for increased apoptosis, and by an inflammatory infiltrate rich in CD4 and CD8 cells in 3 samples that were studied (Supplemental Fig 1 available via Mendeley at https://data.mendeley.com/datasets/f5xxzz2rdr/1#file-cf0fe714-7f3e-482d-901d-c4d88a7dfdbd). The identified mutations, *PMVK* c.329G>A, p.R110Q, and *MVD* c.70+5G>A, have been reported before. In addition, we identified the unreported variant,