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Conflicts of interest

Dr Craiglow has received honoraria and/or fees from Aclaris, Arena Pharmaceuticals, Regeneron, Sanofi Genzyme, and Pfizer. Author Olamiju has no conflicts of interest to declare.

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Dupilumab therapy for alopecia areata in pediatric patients with concomitant atopic dermatitis

To the Editor: Alopecia areata (AA) is often refractory to conventional therapies. Dupilumab, a systemic interleukin 4 receptor blocker currently approved for atopic dermatitis (AD) in children aged >6 years, may be a potential therapy. Some case reports describe improvement with dupilumab therapy, and there is an ongoing clinical trial assessing dupilumab in adult patients with AA.[1-3] A few reports show new or worsening AA with dupilumab initiation.[4]

We report the characteristics and outcomes of 16 pediatric patients with AA on dupilumab therapy (Table I; Supplemental Table I available via Mendeley at doi: 10.17632/wswm2nv4dx.3). Most had long-standing disease (median 4 years from diagnosis) and were refractory to multiple therapies before dupilumab (median 4 prior therapies). Oral steroids had failed in 12, and methotrexate failed in 9. All had concomitant AD, and 4 had asthma. Seven patients had alopecia universalis, 5 had ophiasis AA, and 4 had patchy AA.

Patients received 300 mg subcutaneous injections of dupilumab every 2 weeks. Three had mild injection site reactions. Four (patients 2, 3, 7, and 16) worsened on dupilumab initially, with an average worsening in the Severity of Alopecia Tool (SALT) score of 11.3 (1-2 months after initiation), but those with follow-up improved with time. The SALT scores in 2 patients were 0 at 12 months.

Subset analysis of 6 patients with active disease at initiation and >4 months of follow-up showed that 4 (patients 3, 4, 14, and 15) experienced improvement in their AA (Fig 1; Supplemental Fig 1, available via Mendeley at doi: 10.17632/gdj2tnyz42.1), and 2 patients (6 and 12) had no/minimal improvement. Both patients with no significant improvement had SALT scores of 100 before dupilumab therapy. Of those with improvement, the average reduction in SALT score was 33.3 after 12 months. All patients with improvement had moderate to severe AD (Investigator's Global Assessment scores of 3-4) at initiation, with a lower median age at AD diagnosis and longer median duration of AD (6 years old and 6 years, respectively) compared with the non-responders (13 years old and 1 year, respectively).

Although this sample is small, these findings are consistent with prior reports showing greater likelihood of regrowth with dupilumab in patients with more severe and long-standing histories of AD.[5] Of the 4 patients with SALT scores of 0 at the time of dupilumab initiation, 2 (patients 1 and 9) were on systemic tofacitinib for AA and tolerated decreasing doses of tofacitinib without increased hair loss, suggesting the potential use of dupilumab in dose de-escalation of oral Janus kinase inhibitors. None of the 6 patients with active disease at initiation and with ≤4 months of follow-up had experienced regrowth at the most recent follow-up. All patients, including those with only limited follow-up, had clinical improvement of their AD and asthma.

Dupilumab was prescribed to pediatric patients with severe or refractory AA and concomitant AD. A subset of patients who received dupilumab experienced significant hair regrowth. Dupilumab may be a therapeutic option for AA in those when traditional therapies have failed, especially in patients with concurrent AD or asthma, for which the benefits of dupilumab are clear. Further studies with larger cohorts are needed to determine the efficacy of dupilumab for AA and the adverse effects of therapy.

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Table I. Demographics of pediatric patients with alopecia areata (*AA*) on dupilumab and AA response to therapy

Patient	Age at dupilumab initiation, y (sex)	Self-reported background	Type of AA at initiation	Age at AA diagnosis, y	Prior therapies for AA	Therapies for AA while on dupilumab	Relevant medical history	Age at AD diagnosis (duration, y)	Highest prior SALT score recorded	SALT score before initiation of dupilumab	Duration of dupilumab therapy, mo	SALT scores at follow-up visits after dupilumab
1	13 (F)	Asian	History (patchy)	8	Topical steroids, oral steroids, oral tofacitinib, intralesional steroids	Oral tofacitinib	IGA 3 AD	8 y (5)	15	0	11	3 months: 0 6 months: 0 10 months: 0
2	14 (F)	African American	Universalis	3	Topical steroids, oral methotrexate, oral steroids		IGA 2 AD	11 y (3)	100	98	5	4 months: 100
3	13 (F)	African American	Ophiasis	4	Topical steroids, oral steroids, intralesional steroids		IGA 3 AD	4 y (9)	45	25	14, ongoing	1 month: 45 4 months: 25 12 months: 0
4	8 (M)	White, Hispanic	Ophiasis	5	Topical steroids, oral steroids, topical anthralin, oral methotrexate, topical retinoid		IGA 4 AD	4 y (4)	100	35	7, ongoing	7 months: 8
5	10 (F)	White	Universalis	3	Oral steroids, topical steroids, topical tofacitinib, topical retinoid, topical anthralin		IGA 3 AD, hypothyroidism	4 y (6)	100	100	3, ongoing	3 months: 100
6	13 (M)	White	Universalis	12	Topical steroids, topical squaric acid, topical tofacitinib	Topical tofacitinib, oral methotrexate (1 month)	IGA 3 AD	12 y (1)	100	100	14, ongoing	4 months: 100 8 months: 100 12 months: 100
7	15 (M)	White, Hispanic	History (patchy)	15	Topical steroids, oral methotrexate, intralesional steroids	Intralesional steroids	IGA 3 AD, asthma	10 y (5)	25	0	31, ongoing	2 months: 10 6 months: 10 11 months: 0 13 months: 10 14 months: 10 17 months: 0 27 months: 0
8	16 (F)	White	Patchy	11	Topical steroids, intralesional steroids, minoxidil	Minoxidil	IGA 2 AD, asthma	10 y (6)	100	23	11, ongoing	4 months: 23

9	17 (F)	White	History (universalis)	10	Topical steroids, minoxidil, intralesional steroids, oral tofacitinib, topical anthralin, squaric acid, oral steroids	Oral tofacitinib, minoxidil, spironolactone	IGA 2 AD	10 y (7)	85	0	11, ongoing	4 months: 0
10	12 (M)	African American	History (ophiasis)	8	Topical steroids, topical retinoid		IGA 4 AD, asthma	7 y (5)	25	0	14, ongoing	3 months: 0 7 months: 0 13 months: 0
11	17 (F)	White	Ophiasis	13	Topical steroids, intralesional steroids, oral steroids, topical retinoid, oral methotrexate, oral tofacitinib		IGA 3 AD, hypothyroidism	3 y (14)	80	18	2	2 months: 18
12	15 (M)	White	Universalis	12	Topical steroids, intralesional steroids, oral steroids, topical retinoid, oral methotrexate		IGA 2 AD, asthma	14 y (1)	100	100	15, ongoing	2 months: 98 6 months: 98 8 months: 98 12 months: 98
13	13 (F)	White	Ophiasis	11	Topical steroids, oral steroids, topical anthralin, oral methotrexate, topical tofacitinib	Intermittent topicals only	IGA 4 AD	12 y (1)	90	45	2	1 month: 45 2 month: 45
14	12 (F)	White, Hispanic	Universalis	11	Topical steroids, intralesional steroids, oral steroids, topical anthralin, topical retinoid, oral methotrexate		IGA 3 AD, hypothyroidism	10 y (2)	100	100	16, ongoing	5 months: 99 8 months: 85 11 months: 50
15	16 (M)	White	Patchy	13	Topical steroids, oral steroid, topical retinoid, intralesional steroids, oral methotrexate	Intralesional steroids	IGA 4 AD, celiac disease	8 y (8)	25	25	16, ongoing	4 months: 10 12 months: 0
16	19 (F)	White	Universalis	11	Topical steroids, oral steroids, oral methotrexate, minoxidil, topical tofacitinib	Topical tofacitinib	IGA 3 AD	16 y (3)	100	85	11, ongoing	2 months: 98

AA, Alopecia areata; *AD*, atopic dermatitis; *F*, female; *IGA*, Investigator's Global Assessment; *M*, male; *SALT*, Severity of Alopecia. Tool.

Fig 1. Alopecia areata. Patient 3 after 4, 7, and 12 months of dupilumab therapy.

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Conflicts of interest

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Seborrheic dermatitis-distributed rash in dermatomyositis is associated with progressive interstitial lung disease

To the Editor: Dermatomyositis (DM) is an autoimmune disease characterized by distinct cutaneous rashes, muscle inflammation, and potential involvement of internal organs. Clinically amyopathic DM (CADM) is a unique subset of DM without myositis. Interstitial lung disease (ILD),

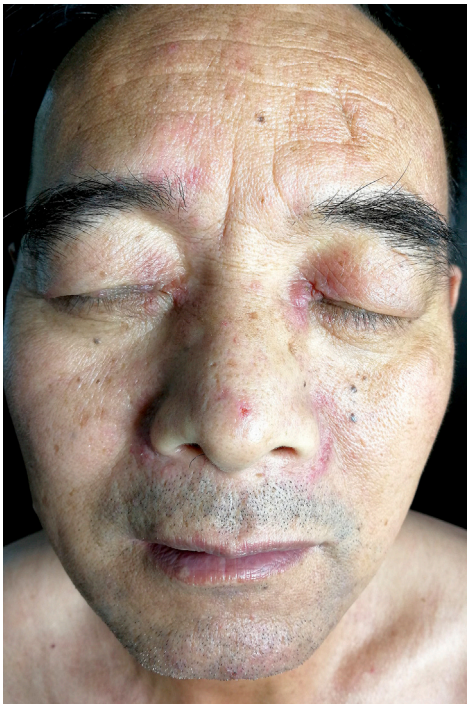

Fig 1. Dermatomyositis. Facial seborrheic dermatitis-distributed rash in a 59-year-old man, manifested as greasy purplish erythema with few flaky scales distributed in forehead, eyebrows, inner canthus, and nasal T zones.