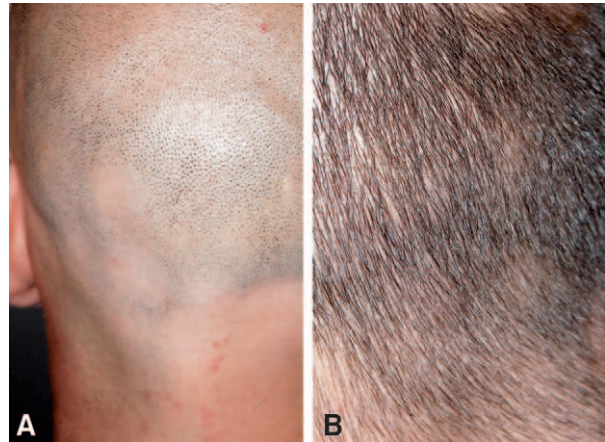


### 308-nm excimer laser therapy in alopecia areata

*To the Editor:* Alopecia areata (AA) is believed to be a T-cell autoimmune disorder, and 308-nm excimer laser is able to induce T-cell apoptosis in vitro,<sup>1</sup> suggesting that this laser might be effective in treating this disease. We have performed a comparative prospective intraindividual study to assess the effectiveness of the 308-nm excimer laser in the treatment of AA.

Nine patients were included in the study. The laser used was a 308-nm excimer laser (Talos, Wavelight Laser Technology AG, Erlangen, Germany). Each lesion was treated twice a week for a maximum of 24 sessions. Initial fluencies were 50 mJ/cm<sup>2</sup> less than minimal erythema dose. Then fluencies were increased from 50 mJ/cm<sup>2</sup> every two sessions. Each treated lesion had an opposite side untreated target lesion serving as a control. Tolerance was evaluated with a visual analogue scale (0 = poor, 10 = excellent). Efficacy was blindly evaluated by two independent physicians on direct-light photos (Fujifilm Finepix S1 Pro; Fujifilm Ltd, Tokyo, Japan) taken before sessions, at the end of the sessions, and 3 months after sessions. Regrowth was graded on a 6-point scale (0 = no hair regrowth, 1 = hair regrowth 1%-24%, 2 = hair regrowth 25%-49%, 3 = hair regrowth 50%-74%, 4 = hair regrowth 75%-99%, and 5 = complete hair regrowth). At the final visit, the patients' opinions about treatment effectiveness and the degree of satisfaction were recorded (excellent, good, moderate, poor).

The results are summarized in Table I. Our study shows that 308-nm excimer laser induces effective hair regrowth in all patients with alopecia areata partialis (AAP) (Fig 1). The occurrence of hair regrowth only on the treated patches proves the efficiency of this therapy and excludes the possibility of spontaneous hair regrowth that should be always considered when evaluating AA treatments. None of these patients lost their hair over a follow-up period of 3 months. On the other hand, no hair regrowth was observed in patients with either alopecia areata universalis (AAU) or alopecia areata totalis (AAT). Moreover, the small size of the hand piece (maximum 25-mm diameter) makes the treatment of the entire scalp long and tiresome. These results are in agreement with the prognosis factors usually observed in AA. Interestingly, only a few sessions were necessary to obtain aesthetically correct results in AAP. These results were obtained from moderate accumulated doses. The side effects were limited to mild erythema and hyperpigmentation, and the tolerance was excellent. Many therapies have been tried for AA, but



**Fig 1.** **A**, Alopecia areata patches before treatment. **B**, Complete regrowth after 7 sessions.

comparisons between the results obtained from these various treatments are difficult because of the heterogeneity of AA in its presentation and its responses to treatments. Thanks to its good tolerance, phototherapy is an attractive treatment. Several studies have been reported concerning the efficacy of systemic<sup>2,3</sup> and topical psoralen-UVA therapy<sup>4</sup> in the treatment of AA. Paradoxical response rates were reported in the literature. Interestingly, preliminary efficacy of narrowband UVB phototherapy for AA was reported recently in a left-right monitored pilot study.<sup>5</sup> This report underscores the potential efficiency of UVB in AA treatment.

In conclusion, the 308-nm excimer laser appears to be a good therapeutic alternative for AAP. Nevertheless, additional monitored studies on a larger population are necessary to validate our encouraging preliminary results.

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**Table I.** Population and results

Case no.	Age (y)	Sex	Phototype	MED mJ/cm <sup>2</sup>	Duration of disease	Past treatments (% regrowth)	Type of AA	Onset of hair regrowth	Total of sessions	Cumulative doses	Tolerance	Hair regrowth	Hair regrowth 3 months after end of treatment	Assessment by the patient
1	32	F	IV	400	1 y	Intralesional steroid (100%)	AAP	Session no. 4 (0.9 J/cm <sup>2</sup> )	18	5.2 J/cm <sup>2</sup>	10/10	5	5	Excellent
2	38	F	IV	300	11 y	Minoxidil 5% (0%); intralesional steroid (0%); UVB (15%)	AAP	Session no. 6 (1.8 J/cm <sup>2</sup> )	24	7.5 J/cm <sup>2</sup>	10/10	3	3	Moderate
3	12	M	III	220	3 y	Minoxidil 5% (0%)	AAP	Session no. 7 (1.6 J/cm <sup>2</sup> )	24	4.8 J/cm <sup>2</sup>	10/10	4	4	Excellent
4	38	F	III	220	10 y	None	AAU	0	24	6.1 J/cm <sup>2</sup>	10/10	0	0	Poor
5	42	F	III	400	2 y	Topical steroid (0%); minoxidil 5% (0%); systemic steroid (0%)	AAU	0	24	15.5 J/cm <sup>2</sup>	10/10	0	0	Poor
6	56	W	III	550	4 y	Minoxidil 5% (0%); systemic steroid (0%)	AAT	0	24	10.8 J/cm <sup>2</sup>	9/10	0	0	Poor
7	45	F	III	400	3 y	Topical steroid (0%); intralesional steroid (0%)	AAU	0	24	9.5 J/cm <sup>2</sup>	9/10	0	0	Poor
8	47	F	II	400	5 y	Minoxidil 5% (0%); systemic steroid (0%); Psoralen-UVA (0%)	AAP	Session no. 15 (7.6 J/cm <sup>2</sup> )	24	16.8 J/cm <sup>2</sup>	10/10	4	4	Excellent
9	29	M	III	300	1 y	Minoxidil 5% (0%); systemic steroid (0%)	AAP	Session no. 6 (1 J/cm <sup>2</sup> )	12	3.9 J/cm <sup>2</sup>	10/10	5	5	Excellent

AA, Alopecia areata; F, female; M, male; MED, minimal erythema dose.

Hair regrowth: 0 = no hair regrowth, 1 = hair regrowth 1% to 24%, 2 = hair regrowth 25% to 49%, 3 = hair regrowth 50% to 74%, 4 = hair regrowth 75% to 99%, and 5 = complete hair regrowth.

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### Amyopathic dermatomyositis presenting during pregnancy

*To the Editor:* Amyopathic dermatomyositis (ADM) presents with pathognomonic cutaneous manifestation of dermatomyositis (DM) but without associated skeletal muscle involvement. ADM associated with pregnancy has not been described.

A 34-year-old woman in the third month of pregnancy presented with facial erythema and pruritic papules on the dorsal hands, elbows, and knees. The rash had appeared at 4 weeks' gestation. She had not taken any medicine before the rash appeared. She did not complain of muscle pain or weakness. In her first pregnancy, she delivered a healthy baby and had had no cutaneous complications. There was no personal or family history of connective tissue disease.

Examination revealed discrete pruritic red-purple papules over the bony prominences. Periungual telangiectasia was also observed. She had exudative erythema bridging the nose (Fig 1). A skin biopsy specimen from her elbow was compatible with DM (Fig 2). Results of complete blood counts, blood biochemistry analysis, and urinalysis were within normal limits. Although antinuclear antibody titer (1:40) was positive in a nucleolar pattern, other autoantibodies were negative. Based on these findings, this patient was diagnosed with ADM. Potent topical steroids were prescribed but the eruption did not improve. She delivered a healthy