

An Overview of Therapies for Scalp Dermatomyositis



Avani Kolla, BPhil^{1*}; Lynn Liu, BS^{1*}; Katharina Shaw, MD¹; Jerry Shapiro, MD¹; Alisa Femia, MD^{1**}; Kristen Lo Sicco, MD, FAAD^{1**}
 *Authors contributed equally; **Authors contributed equally

¹The Ronald O. Perelman Department of Dermatology, NYU Grossman School of Medicine, New York, NY

INTRODUCTION

- Cutaneous dermatomyositis (DM) negatively impacts health-related quality-of-life
- Cutaneous involvement of the scalp is a common manifestation of DM
 - Scalp symptoms/signs include: skin eruption, non-scarring alopecia, pruritus, and/or burning
 - These symptoms are often severe and debilitating, as well as frequently recalcitrant to standard skin and/or muscle-directed therapies
- There is a paucity of guidelines to inform management of scalp symptoms in patients with cutaneous DM
- **Aim: Review the literature regarding treatments utilized for cutaneous DM in patients with scalp symptoms**

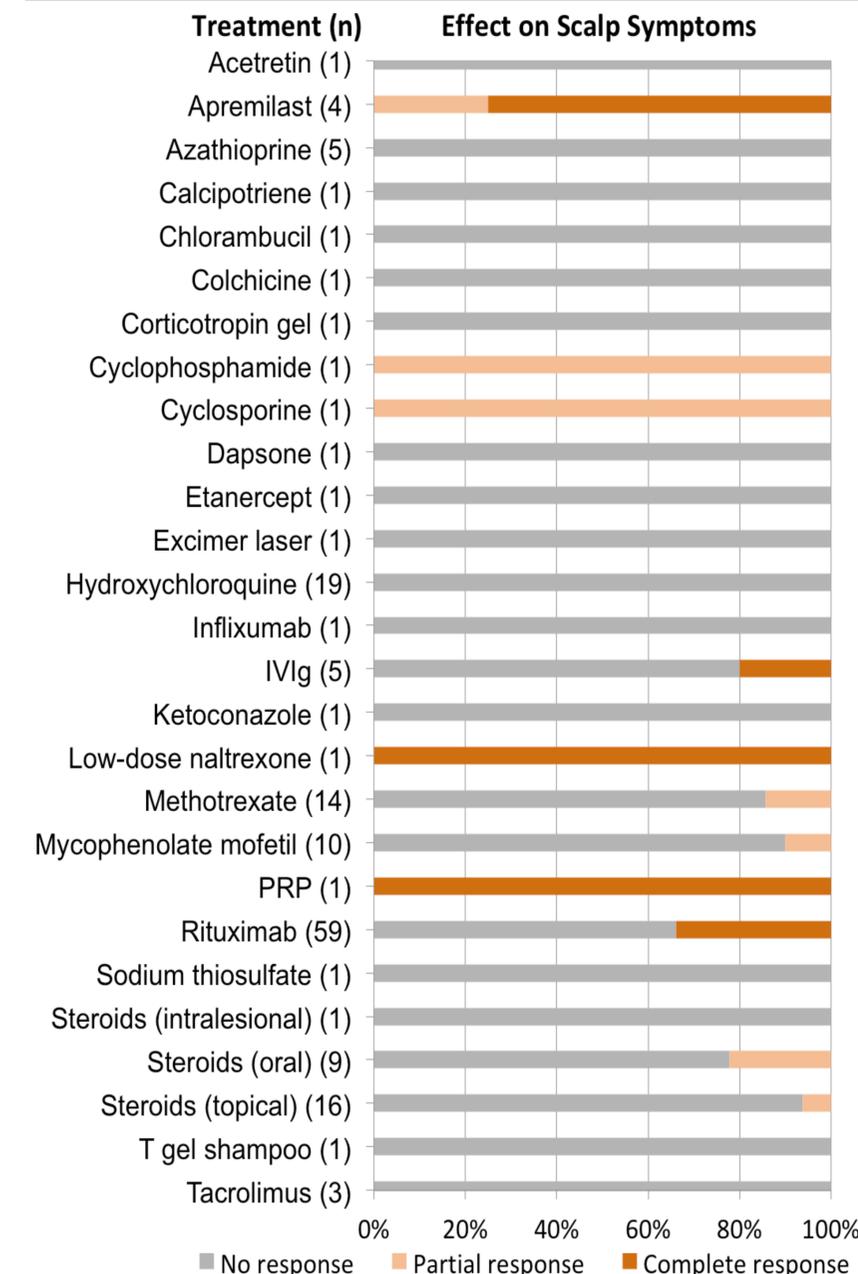
Methods

- PubMed and Google Scholar databases were searched
 - Key terms: *dermatomyositis, scalp, hair, alopecia, and treatment*
- Inclusion criteria: primary research reporting treatment outcomes in at least one patient with DM with scalp
- Exclusion criteria: review articles
- Data regarding baseline scalp symptoms, previous and current treatment regimens, and level of improvement in scalp symptoms were collected

RESULTS

- 8 studies were identified from 2005 to 2019
 - Primary focus was general cutaneous DM in 6 studies and scalp DM in 2 studies
- 77 patients with cutaneous DM were reported to have scalp symptoms
 - Mean (range) length of cutaneous DM: 9.6 years (3 month to 22 years)
 - Majority of patients had previously utilized ≥ 3 treatments with minimal improvement in cutaneous symptoms
- 27 treatments were reported to have been utilized to manage cutaneous DM in patients with scalp involvement

RESULTS



RESULTS

Treatments Resulting in Complete Resolution of Scalp Symptoms	Study Types (n)	Scalp Symptoms with Improvement	Improvement in Other Cutaneous Symptoms?
Platelet-rich plasma (PRP)	Case report (1)	Pruritus, erythema, alopecia	No
Low-dose naltrexone	Case report (1)	Pruritus	Yes
Apremilast	Case series (3), case series (1)	Pruritus	Yes
Rituximab	Case series (3), pilot study (2), RTC (54)	Pruritus, erythema, alopecia	Yes
Intravenous immunoglobulin (IVIg)	Retrospective analysis (1)	Not specified	Not specified

CONCLUSIONS

- **Literature regarding treatments for scalp DM is limited and consists largely of case reports/case series**
- Scalp DM is often **recalcitrant to standard skin-directed therapies** for DM (i.e. corticosteroids, hydroxychloroquine, and methotrexate)
 - Notably, studies not included in this review have examined these therapies and have yielded moderate/positive results for cutaneous DM, but did not comment on scalp symptoms
- **Low-dose naltrexone** and **PRP**, as well as two frequent and one less common therapy for cutaneous dermatomyositis (**IVIg, rituximab, and apremilast**, respectively), have been associated with improvement in scalp symptoms and in some cases, full sustained resolution
 - These therapies, particularly rituximab, may represent promising areas of future research
 - Further evaluation with larger clinical trials is necessary to better determine the clinical utility of these therapies in managing scalp DM
- **Limitations:** small sample sizes of studies, heterogeneity of studies reviewed, lack of validated outcome measures for scalp involvement in DM, and potential for selection bias

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