



# Should systemic corticosteroids be relatively contraindicated in granuloma annulare?



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## Introduction

### Facts about Granuloma Annulare (GA):

- GA is a benign granulomatous dermatosis that can be localized (LGA), generalized (GGA), and subcutaneous
- GA's etiology is not fully understood, but it may involve a delayed-type hypersensitivity reaction

### LGA to GGA Transformation:

- LGA can be self-limited and is often treated locally while GGA more commonly involves systemic treatment
- However, patients might receive systemic corticosteroids for several reasons (their effectiveness, coexistent systemic conditions that necessitate them, and/or from non-dermatologists who are less familiar with GA)
- We have observed the generalization of LGA into GGA (and worsening of baseline GGA) upon corticosteroid tapering, and sought to formally investigate this phenomenon

## Methods

- Institutional Review Board approval was obtained to perform a retrospective medical record review of GA patients seen in our clinic from 2013-2023
- Patients' disease distributions (LGA vs GGA) were determined via clinical documentation review
- LGA was defined as GA impacting only a single skin region (e.g., neck or thigh), while GGA was defined as ten or more GA lesions affecting more than one skin area (e.g., trunk and either the upper or lower extremities and/or the head).
- Statistical analysis was conducted via Chi-Square and 2-sample t-tests.

## Results

### Patient Demographics:

- 144 patients met inclusion criteria, primarily non-Hispanic (141/144) females (125/144) with biopsy-proven GA (93/144)
- 30 patients were prescribed prednisone tapers
- Of these patients, 5/30 had presented at their initial consult with GGA, 24/30 experienced LGA to GGA transformation upon corticosteroid tapering, and 1/30 experienced no transformation after corticosteroid exposure
- The average initial prednisone dose was 30.3 mg daily (range 5-80 mg daily), the average taper length was 24.3 days (range 3-90 days), and the majority of prednisone tapers were prescribed by private practice dermatologists (12/30) or primary care providers (8/30).
- Prednisone tapers were associated with the progression of LGA into GGA ( $p < 0.05$ ).

**Figure 1a (left) and 1b (right):** Visual illustration of an individual who experienced local to generalized dissemination of granuloma annulare after a taper of oral prednisone. The lesions began on her neck before spreading to her bilateral upper extremities



## Conclusions

- It appears that systemic corticosteroids might be associated with rebound in GA.
- Future studies may consider utilizing standardized doses and durations of systemic corticosteroid monotherapy, while also recording exact numbers (and possibly severity scores) of lesions with precise timelines of generalization.

## References

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