

Previously, Soma et al reported morphea in 9 of 135 (6.7%) patients with SSc,<sup>5</sup> with only 4 of 9 noted to have lcSSc. Prior studies on overlap patients have been difficult to interpret, as the diagnostic criteria used are often unclear. Our study was novel in that we classified our SSc patients using the 2013 ACR/EULAR criteria. These criteria reflect significant diagnostic advancements and have greater sensitivity and specificity for SSc,<sup>3</sup> especially for those with lcSSc and/or early disease, providing an opportunity to reexamine SSc and morphea overlap.

Our study was limited by its small sample size and retrospective design. The study was not designed to quantify the risk of morphea coexistence with SSc, but rather to document clinical characteristics in a cohort of overlap patients. Further, these findings represent the clinical experience of only one institution and thus may not be generalizable to the population at large.

Our data suggest that, although morphea and SSc are fundamentally 2 clinically distinct diseases, they may share common pathophysiologic and/or genetic pathways given that the rate of overlap was higher than expected. SSc, which may have very limited cutaneous sclerosis, should be ruled out in patients that have lesions of morphea, especially those with the generalized subtype, Raynaud's phenomenon, and/or nailfold capillary changes.

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## The effect of omalizumab dosing and frequency in chronic idiopathic urticaria: Retrospective chart review



*To the Editor:* Chronic idiopathic urticaria (CIU), defined as hives and swelling lasting longer than 6 weeks without an identifiable etiology, can be debilitating.<sup>1</sup> Omalizumab is US Food and Drug Administration-approved at 150 mg and 300 mg dosing every 4 weeks (Q4W).<sup>2</sup> Our clinical experience suggests that dosing at 300 mg every 2 weeks (Q2W) provides greater efficacy in CIU than 300 mg Q4W. We herein present data from a retrospective chart review investigating the efficacy and clinical features of CIU patients treated with omalizumab at different doses (Q2W vs Q4W).

We reviewed charts from all patients treated with omalizumab for any cutaneous indication at a university-based dermatology and immunology practice from January 1, 2006, through March 31, 2015. Data from chart review included: demographics, diagnosis, duration of disease, history of angioedema, the omalizumab dosage, frequency, and duration of treatment, subjective clinical response and adverse effects to therapy, therapies used before, during, and after treatment with omalizumab, and skin biopsy findings. One limitation of our study was a lack of uniform measures of improvement. A significant response was determined by 2 independent reviewers using a broad definition of a 50% reduction of urticaria using either a severity scale of 1 to 10 or symptom frequency. Statistical analyses using either Student *t*-test or the  $\chi^2$  test was performed using SPSS v22 (IBM, Somers, NY).

Forty-eight patients with chronic urticarial dermatoses were identified: 43 with CIU, 2 with urticarial vasculitis, and 3 with urticarial bullous pemphigoid. Only patients with CIU were included in the analysis (mean age, 43.2 years; female, 79.1%; white, 90.7%; history of angioedema, 31%); 2 patients were lost to follow-up. Overall 90.2% (37/41) of patients responded to omalizumab within 3 months. No significant difference was found between responders' and non-responders' age, gender, history of angioedema, or previous treatments (Table I).

**Table I.** Differences in patient demographic and treatment characteristics by response ( $\geq 50\%$  improvement) to omalizumab in patients with CIU (n = 41)

|                              | Response to omalizumab |                     | P value |
|------------------------------|------------------------|---------------------|---------|
|                              | Yes                    | No                  |         |
| % (N)                        | 90.2 (37)              | 9.5 (4)             | —       |
| General characteristics      |                        |                     |         |
| Age (years)                  | 44.7 ( $\pm 15.7$ )    | 35.5 ( $\pm 10.3$ ) | .26     |
| Age at diagnosis (years)     | 39.8 ( $\pm 15.7$ )    | 32.0 ( $\pm 8.6$ )  | .34     |
| Female                       | 78.9 (30)              | 75.0 (3)            | .63     |
| White                        | 89.5 (34)              | 100.0 (4)           | .66     |
| History of angioedema        | 28.9 (11)              | 50.0 (2)            | .36     |
| Failed/attempted medications |                        |                     |         |
| Antihistamines*              | 100.0 (38)             | 100.0 (4)           | 1.00    |
| Montelukast                  | 28.9 (11)              | 50.0 (2)            | .36     |
| Prednisone                   | 71.1 (27)              | 100.0 (4)           | .28     |
| Cyclosporine                 | 50.0 (19)              | 50.0 (2)            | 1.00    |
| Methotrexate                 | 39.5 (15)              | 0.0 (0)             | .16     |
| Mycophenolate mofetil        | 28.9 (11)              | 0.0 (0)             | .28     |
| Dapsone                      | 23.7 (9)               | 0.0 (0)             | .37     |
| Colchicine                   | 15.8 (6)               | 0.0 (0)             | .53     |
| Omalizumab duration (months) | 15.2 ( $\pm 6.7$ )     | 4.3 ( $\pm 0.5$ )   | <.001   |
| Dose increase of omalizumab  | 7.9 (3)                | 0.0 (0)             | .74     |

Data presented as % (n) or mean ( $\pm$ SD).

CIU, Chronic idiopathic urticaria; SD, standard deviation.

\*Antihistamines failure included at least one of the following: diphenhydramine (at least 25 mg daily), cetirizine (at least 10 mg daily), fexofenadine (at least 180 mg daily), loratadine (at least 10 mg daily), levocetirizine (at least 5 mg daily), desloratadine (at least 5 mg daily), hydroxyzine (at least 25 mg daily), and/or doxepin (at least 25 mg daily).

Of 43 patients treated with omalizumab, 34 started at 300 mg and 9 started at 150 mg. Five patients starting at 150 mg responded, 3 patients required 300 mg Q2W for response, and 1 was lost to follow-up. In CIU patients receiving omalizumab 300 mg either Q2W or Q4W,  $\geq 50\%$  response rates were achieved in 100.0% (24/24) of patients treated Q2W compared with 66.7% (8/12) of patients treated Q4W ( $P = .008$ ; Table II). Adverse events were mild, including headache, alopecia, nausea, and arthralgia. No patients stopped the medication due to adverse events.

Dosing of omalizumab for CIU has continued to change based on new research. Initially, dosing followed asthma guidelines determined by IgE levels.<sup>3</sup> Danish researchers published an algorithm starting patients at 150 mg and adjusting the dose and frequency at 2-week follow-up appointments.<sup>4</sup> A

**Table II.** Level of improvement (% [n]) in CIU by omalizumab dosing (n = 36)

|                      | 300 mg Q2W | 300 mg Q4W | P value |
|----------------------|------------|------------|---------|
| % (N)                | 66.7 (24)  | 33.3 (12)  | —       |
| Improvement          |            |            | .01     |
| None                 | 0.0 (0)    | 25.0 (3)   |         |
| Mild (<50%)          | 0.0 (0)    | 8.3 (1)    |         |
| Significant          | 100.0 (24) | 66.7 (8)   |         |
| $\geq 50\%$ Response | 100.0 (24) | 66.7 (8)   | .008    |

CIU, Chronic idiopathic urticaria; Q2W, every 2 weeks; Q4W, every 4 weeks.

recent systematic review compared omalizumab 75, 150, 300, 600 mg Q4W versus placebo and concluded that 300 mg Q4W is an effective dosing schedule in treating CIU.<sup>5</sup> Our retrospective cohort suggests that higher response rates are obtained by treating CIU with omalizumab 300 mg Q2W instead of Q4W. Prospective studies are required to validate this finding.

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### The subunit method: A novel excisional approach for rhinophyma



*To the Editor:* Rhinophyma causes disfigurement and nasal airway obstruction. Common treatments include partial removal and delayed secondary healing.<sup>1,2</sup> These approaches do not correct loss of nasal support from advanced disease. The purpose of this study was to evaluate a novel excisional

technique termed “the subunit method,” which applies subunit principles to restore the severe rhinophymatous nose.

Medical records of consecutive patients with rhinophyma treated with the subunit method were retrospectively studied. Patient age, gender, framework enhancement with sutures or cartilage grafts, use of skin grafts, revisions, and follow-up were assessed.

Preoperative evaluation of the 9 nasal subunits<sup>3</sup> and airway passages is performed. Incisions are placed at subunit junctions (sidewalls and dorsum, dorsum and tip, and alae and sidewalls; Fig 1). The distal nose is degloved by raising 6 flaps (2 alar, 2 sidewall, dorsum, and a soft triangle/columella/tip flap) that are 2-3 millimeters thick. Phymatous tissues



**Fig 1.** A 34-year-old male with rhinophyma. **A**, Prior to onset of disease; **B**, Presentation at clinic with phymatous dorsum, tip, sidewalls, and alae which have effaced tip definition; **C**, Enlarged nasal tip on basal view. Note representation of columellar artery perfusing the soft triangle/columella/tip flap; **D**, 6 subunit flaps elevated to expose sebaceous hypertrophy; **E**, Basal view shows improved tip shape; **F**, Postoperative appearance 4 months later. Note scars at subunit junctions are well-concealed. Nasal contour and tip definition are restored.