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Attitudes and trends in the treatment of morphea: a national survey

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Research Letter

Attitudes and trends in the treatment of morphea: a national survey

To the Editor: Patients with morphea (localized scleroderma) are routinely seen by dermatologists and rheumatologists. A recent publication of a patient-based survey showed treatment choices potentially influenced by specialty training, with dermatologists prescribing more topical treatments and phototherapy and rheumatologists more systemic immunosuppressives.¹ A recent cross-sectional survey of pediatric rheumatologists showed general agreement in using methotrexate and systemic corticosteroids.² However, no studies have examined morphea practice trends across both specialties from the providers' point of view; therefore, we surveyed adult and pediatric dermatologists and rheumatologists to determine these trends.

Survey questions were based on those published by Li et al (with permission), and modified with feedback from reviewers at the UT Southwestern dermatology department.² An Institutional Review Board- approved, web-based survey (SurveyMonkey.com) was emailed to 1244 randomly-selected members of the American Academy of Dermatology, American College of Rheumatology, and Society for Pediatric Dermatology. 271 paper surveys were mailed to randomly-selected members of the Childhood Arthritis and Rheumatology Research Alliance (CARA) due to non-availability of member email addresses. Excluding

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This study has not been presented or published previously.

those who opted out of the web-based survey, a total of 228 web-based and 51 paper surveys were returned, giving an 18.8% response rate.

Table I shows survey respondent demographics; Table II shows respondents' first-line treatments for plaque, linear (including En Coup de Sabre and Parry-Romberg), and generalized morphea. For plaque morphea, more rheumatologists (adult and pediatric) reported prescribing methotrexate with or without systemic steroids ($P < .0001$ and $P = .0272$, respectively), while more dermatologists (adult and pediatric) reported prescribing topical steroids ($P < .0001$). For linear morphea, more dermatologists (adult and pediatric) reported prescribing topical steroids ($P = .0033$) and phototherapy ($P = .0456$), however, pediatric dermatologists and rheumatologists reported use of methotrexate with or without systemic steroids ($P = .0007$ and $P < .0001$, respectively). For generalized morphea, fewer dermatologists prescribed methotrexate with ($P = .0078$) or without ($P = .0142$) systemic steroids than pediatric dermatologists or rheumatologists (adult and pediatric); only dermatologists (adult and pediatric) reported phototherapy use ($P = .0007$).

In summary, surveyed dermatologists (adult and pediatric) reported preference for topical treatments, while rheumatologists (adult and pediatric) reported preference for systemic immunosuppressives. These differences were minimized among pediatric providers, who reported greater use of systemic immunosuppressives in moderate-to-severe morphea subtypes. Pediatric providers may more closely follow published treatment plans due to increased awareness of morphea.³ Limitations of this survey include the differences of the 4 subspecialty groups in terms of practice setting and number of morphea patients seen per year, which could also affect treatment choices; the low response rate prevents significant conclusions to be made from sub-analyzing the subspecialties based on these variables. These results underscore the need for comparative studies for better treatment evidence, and multidisciplinary input for generalizability.

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REFERENCES

1. Johnson W, Jacobe H. Morphea in adults and children cohort II: Patients with morphea experience delay in diagnosis and large variation in treatment. *J Am Acad Dermatol.* 2012; 67(5):881–9. [PubMed: 22382198]
2. Li SC, Feldman BM, Higgins GC, Haines KA, Punaro MG, O'Neil KM. Treatment of pediatric localized scleroderma: results of a survey of North American pediatric rheumatologists. *J Rheumatol.* 2010; 37(1):175–81. [PubMed: 19918041]
3. Christen-Zaech S, Hakim MD, Afsar FS, Paller AS. Pediatric morphea (localized scleroderma): review of 136 patients. *J Am Acad Dermatol.* 2008; 59(3):385–96. [PubMed: 18571769]

Table I

Demographic characteristics of specialists treating morphea patients

Characteristic	Dermatologist	Dermatologist (Pediatric)	Rheumatologist	Rheumatologist (Pediatric)
No of respondents, n (%)	74 (31.0)	61 (25.5)	52 (21.8)	52 (21.8)
Training				
Number of years since completion of residency, mean $\pm$ SD	22.2 $\pm$ 10.4	18.5 $\pm$ 8.3	24.6 $\pm$ 10.9	20.9 $\pm$ 10.3
No of respondents who completed fellowships, n (%)	13 (17.6)	31 (50.8)	48 (92.3)	49 (94.2)
Practice Setting, n (%)				
Solo	26 (35.1)	5 (8.2)	10 (19.2)	*
Partnership/Group	31 (41.9)	16 (26.2)	13 (25.0)	*
Multi-specialty	11 (14.9)	14 (23.0)	10 (19.2)	*
Academic	12 (16.2)	36 (59.0)	16 (30.8)	*
Other	1 (1.4)	2 (3.3)	5 (9.6)	*
No of morphea patients seen per year, n (%)				
5	46 (62.2)	13 (21.3)	41 (78.8)	25 (48.1)
6-20	24 (32.4)	35 (57.4)	11 (21.2)	22 (42.3)
21-50	4 (5.4)	12 (19.7)	0	4 (7.7)
> 50	0	1 (1.6)	0	1 (1.9)
Morphea Patients, n (%)				
Pediatric ($\leq$ 18 y)	1 (1.4)	37 (60.7)	1 (1.9)	49 (94.2)
Adult (18 + y)	15 (20.3)	0	47 (90.4)	0
Both	58 (78.4)	24 (39.3)	4 (7.7)	3 (5.8)

Denominator used to calculate percentages for Practice Setting, No of morphea patients seen per year, and Morphea patients was total number of respondents in that respective specialty.

* question not assessed for pediatric rheumatologists

Table II

Morphea treatment. Respondents' preferred first-line treatments.

Treatment	Dermatologist, %	Pediatric Dermatologist, %	Rheumatologist, %	Pediatric Rheumatologist, %	p-value (bold if < 0.05)
Plaque morphea					
Methotrexate	0	2.1	22.2	34.6	0.0272
Methotrexate + systemic steroids	0	2.1	11.1	13.5	< 0.0001
Systemic steroids	0	0	0	3.8	0.1882
Antimalarials/antibiotics	2.5	0	19.4	3.8	0.0009
Topical steroids	92.5	74.5	22.2	21.2	< 0.0001
Phototherapy	0	2.1	0	0	0.4336
Linear morphea (including En Coup de Sabre and Parry-Romberg)					
Methotrexate	15.0	21.3	13.9	46.2	< 0.0001
Methotrexate + systemic steroids	15.0	57.4	8.3	38.5	0.0007
Systemic steroids	7.5	0	2.8	11.5	0.0740
Antimalarials/antibiotics	5.0	0	5.6	0	0.1473
Topical steroids	22.5	10.6	2.8	1.9	0.0033
Phototherapy	2.5	8.5	0	0	0.0456
Generalized morphea					
Methotrexate	15.0	23.4	19.4	42.3	0.0142
Methotrexate + systemic steroids	7.5	38.3	30.6	34.6	0.0078
Systemic steroids	10.0	2.1	16.7	11.5	0.1531
Antimalarials/antibiotics	10.0	4.3	5.6	1.9	0.3723
Topical steroids	10.0	6.4	2.8	1.9	0.3080
Phototherapy	20.0	10.6	0	0	0.0007

Dermatologist: n = 40

Pediatric Dermatologist: n = 47

Rheumatologist: n = 36

Pediatric Rheumatologist: n = 52