COLLEGE OF MEDICINE / DEPARTMENT OF INTERNAL MEDICINE / DIVISION OF DERMATOLOGY

The use of rescue therapies for psoriasis patients on biologics

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INTRODUCTION

Psoriasis is a chronic immune-mediated inflammatory skin disease characterized by the formation of scaly and often painful skin plaques.¹ There are multiple forms of psoriasis, such as plaque psoriasis, palmoplantar pustular psoriasis (PPP), generalized pustular psoriasis (GPP), and inverse psoriasis. Psoriasis is associated with decreased quality of life, and this morbidity is especially pronounced for severe psoriasis, which is defined as psoriasis covering 10% of the body surface area.² Systemic medications for severe psoriasis include high dose vitamin A derivatives (acitretin), methotrexate, leflunomide, and biologic agents which target phosphodiesterase, tumor necrosis factor (TNF), interleukin 17, and interleukin

Despite the use of systemic medications, psoriasis may flare, and rescue therapies become necessary for effective treatment. Common rescue therapies for psoriasis include prednisone, intramuscular triamcinolone (IMK), intralesional triamcinolone (ILK), and cyclosporine (CsA); however, use of rescue therapy is poorly characterized in the literature.³

AIN

The aim of this study is to examine rescue therapies used in severe psoriasis and to characterize rescue therapy use in academic clinical settings.

METHODS

A retrospective chart review of rescue therapies used for a total of 103 (59 female, 44 male) patients between the ages of 20 and 90 with severe psoriasis was performed. Patient information regarding demographics and medication use was requested from the Information Warehouse at The Ohio State University from November 2015 until November 2020. Descriptive statistical measures were calculated for rescue therapy usage.

Table 1. Demographics of patients receiving rescue therapy

		Number of Patients	
	Male	44	
Gender	Female	59	
	Total	103	
	White	82	
	African American/Black	9	
	American Indian/Alaskan	1	
	Asian Chinese	1	
Race	Native Hawaiian/Pacific Islander	1	
	Nepali	1	
	More Than One Race	2	
	Unknown (To Patient)	3	
	Other	3	
	Total	103	
	Plaque psoriasis	81	
Diagnosis	Palmoplantar pustular psoriasis	15	
	Acrodermatitis, continua Hallopeau	2	
	Generalized pustular psoriasis	4	
	Inverse psoriasis	1	
	Total	103	
	20-29	20	
Age at Time of Visit	30-39	33	
	40-49	66	
	50-59	50	
	60-69	46	
	70-79	6	
	80-90	15	
	Total	236	

Table 2. Characterization of type of rescue therapy used

		Type of Rescue Therapy				
		IMK	ILK	CsA	Prednisone	
	Number of Courses	58	74	49	55	p-value
Diagnosis	Plaque psoriasis Pustular	24	71 2	31 16	37 18	<0.0001
Gender	psoriasis Male Female	27 31	34	13	27 28	0.0723
On systemic therapy at time of rescue therapy?		26	30	31	22	
	No	48	28	18	33	0.0121
Systemic therapy started post rescue therapy?	Yes	10	19	27	16	10 0001
	No	64	39	22	39	<0.0001

Table 3. Use of prednisone as rescue therapy by dermatologists and non-dermatologists

	Oral Prednisone	Not Prednisone	p-value
Prescribed by Dermatologist	30	178	p<0.0001
Prescribed by Non-Dermatologist	25	2	

RESULTS

Rescue therapy usage did not significantly differ between male and female patients (p=0.0723). Patients were significantly less likely to take systemic therapy before or after their rescue therapy treatment, (p<0.0001, Table 2). Furthermore, non-dermatologists were significantly more likely than dermatologists to prescribe oral prednisone for treating psoriasis flares (p<0.0001, Table 3).

CONCLUSIONS

Dermatologists are more likely to administer IMK, ILK, and CsA for severe psoriasis flares for patients not already on systemic therapy. Patients managed by systemic therapies are less likely to be exposed to rescue therapy. If patients are not doing well on a particular psoriasis therapy, or they experiencing severe flares, it is important for them to see a dermatologist who is equipped to administer the most appropriate and effective therapy for each patient.

ACKNOWLEDGEMENTS

This work was supported in part by the OSU College of Medicine (Roessler) research scholarship (CGH).

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