Comparing methotrexate and acitretin for treatment of refractory Grover's disease

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BACKGROUND

Grover's disease (GD) is a rare papular disorder with an incompletely characterized etiology. Corticosteroids yield resolution in roughly 64% of patients; however, rapid relapses often occur upon tapering.[1] There is a dearth of evidence for use of steroid-sparing immunosuppressive agents such as methotrexate (MTX) for GD.[2] Systemic retinoids are supported by a 100% response rate in a four-patient case series (75% complete clearance).[3]

METHODS

A retrospective review of patients treated with MTX or acitretin for GD at Wake Forest University School of Medicine between 2013-2020 was performed. Patients without biopsy-proven disease and patients without follow-up evaluation were excluded. Outcomes were classified as: complete clearance, partial response (reduced pruritus, fewer/flatter papules, less erythema), no response.

RESULTS

Fifteen GD patients treated with MTX or acitretin were identified. Patients presented with severely pruritic (100%) erythematous papules (100%) on the trunk (100%) and upper extremities (67%), with occasional burning pain (13%). Disease existed a mean 33 months before MTX initiation (median dose 8.75 mg weekly, median duration 13 months), and a mean 6 months before acitretin initiation (median dose 25 mg daily, median duration 5 months).

Comparable proportions of improvements occurred (90% MTX, 80% acitretin) within comparable timeframes (median 2 months MTX, median 2 months acitretin). More MTX patients completely cleared

SUPPLEMENTAL TABLE 1

Supplemental Table 1. Ten Grover's disease patients treated with methotrexate

Age/ sex	Lesion site	Disease duration, months	Pre-MTX therapies	MTX dose, mg weekly (duration, months)	Concomitant medications	Outcome (months to achieve)	Flares	Side effects
68/M	Trunk, UE, LE, scalp	1	Prednisone, cetirizine, diphenhydramine, HCT, TAC	5 (4)	None	CC (1.5)	None	None
74/M	Trunk, UE	4	Doxepin, antihistamines, TCSs	7.5 (4)	Clobetasol, sarna	CC (4)	5 years post-cessation	None
79/M	Trunk, UE, LE	0	Betamethasone	10 (13)	Clobetasol	CC (5), flare (10), CC (13)	3 months post-cessation	None
92/M	Trunk, UE, LE	"Months"	TAC, hydroxyzine, phototherapy	7.5 (12)	Clobetasol, hydroxyzine	CC (6)	10 months post-cessation	None
75/M	Trunk, UE	108	TAC, clobetasol, antihistamines, prednisone	15 (34)	None	PR (2), CC (12)	None	None
72/M	Trunk	"Couple of years"	TCSs, calcipotriene	7.5 (24)	Clobetasol, glycopyrrolate	PR (5), CC (14)	None	None
77/M	Trunk	120	Mycophenolate mofetil, TAC	12.5 (56)	TAC, gabapentin	PR (2), flare (9; upon DR), CC (17), flare, NR	During therapy with dose reduction	None
86/M	Trunk, UE, LE	13	TAC, gabapentin, diphenhydramine	5 (4)	TAC	PR (1)	2 weeks post-cessation	Fatigue
83/M	Trunk	6	TAC, hydroxyzine	10 (20)	TAC, hydroxyzine	PR (2), flare (5), NR	During therapy	None
76/F	Trunk, UE	12	Fluocinonide	10 (11)	Fluocinonide	NR	N/a	None

CC: complete clearance, F: female, HCT: topical hydrocortisone, LE: lower extremities, M: male, MTX: methotrexate, NR: no response, PR: partial response, TAC: topical triamcinolone, TCSs: unspecified topical corticosteroids, UE: upper extremities

RESULTS CONTINUED

(70% vs 20% acitretin). Two MTX responders flared during therapy and both did not respond to subsequent MTX therapy. Four MTX responders flared upon discontinuation (median 6.5 months post-MTX cessation; median follow-up evaluation period 26 months). No acitretin responders flared (median follow-up evaluation period 3 months). MTX and acitretin were well tolerated; one MTX patient (10%) complained of fatigue, and one acitretin patient (20%) experienced dry lips.

CONCLUSIONS

Although this study is limited by a small sample size, non-standardized outcome measures, and flares which may occur as natural fluctuation of the disease, it appears MTX and acitretin may provide some disease control for patients with severe, persistent, and/or recalcitrant GD.

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