

SUPPLEMENTARY MATERIAL

Supplemental Table 1. Literature review of clinical characteristics in corticosteroid-resistant AGEP patients. RA, rheumatoid arthritis; SLE, Systemic Lupus Erythematosus; Resolution Duration (Days): time from drug start to lesion disappearance; NA, not available.

Author	Year	Age	Sex	Targetoid lesion	Delay to onset of symptoms	Primary disease	Suspect Drug	Systemic corticosteroid	Improved Treatment	Resolution Duration (Days)
Current case	2022	30	Female	Y	28	SLE	HCQ	Nonresponse	Ixekizumab	10
Yalçın[1]	2015	67	Female	Y	15	Seronegative polyarthritis	HCQ	Nonresponse	Cyclosporine with prednisolone	5
Duman[2]	2017	42	Female	Y	20	RA	HCQ	Nonresponse	Methylprednisolone and dapsone	35
Castner[3]	2018	56	Female	Y	21	Sjogren's syndrome	HCQ	Nonresponse	Cyclosporine (alone)	42
Otake-Irie[4]	2020	61	Male	Y	7	SLE	HCQ	Nonresponse	Methylprednisolone (1 g/day for 3 consecutive days)	NA
Haruna Matsuda-Hirose[5]	2020	31	Female	Y	15	SLE	HCQ	Nonresponse	Prednisolone and Etretinate	84
Coleman[6]	2020	68	Female	Y	20	Skin nodule disease	HCQ	Nonresponse	Methylprednisolone and IVIG	>10
Sánchez-Velázquez[7]	2021	43	Female	Y	9	Synovitis	HCQ	Nonresponse	Cyclosporine with Methylprednisolone	60
Meiss[8]	2007	34	Male	NA	NA	NA	ampicillin/sulbactam	Nonresponse	Infliximab	14
		49	Female	NA	NA	NA	clindamycin	Nonresponse	Infliximab	14
		43	Female	NA	NA	NA	amoxicillin	Nonresponse	Infliximab	14
Di Lemia[9]	2009	63	Female	N	30	RA	HCQ	Nonresponse	Cyclosporine (alone)	35
İslamoğlu[10]	2019	64	Female	N	20	Sjogren's syndrome	HCQ	Nonresponse	Cyclosporine (alone)	22
Gualtieri[11]	2019	63	Male	N	14	Onychomycosis	Terbinafine	Nonresponse	Secukinumab	3

Supplemental Table 2. Literature review of the clinical characteristic in corticosteroid-sensitive AGEP patients. RA, rheumatoid arthritis; SJS, Stevens-Johnson syndrome; SLE, Systemic Lupus Erythematosus; pSS, Primary Sjogren's syndrome; Resolution Duration (Days), The time from drug start to lesion disappearance; NA, not available.

Author	Year	Age	Sex	Targetoid lesion	Delay to onset of symptoms	Primary disease	Suspect Drug	Systemic corticosteroid	Improved Treatment	Resolution Duration (Days)
Martins[12]	2006	51	Female	N	14	RA	HCQ	response	Systemic steroids	21 d
Paradisi[13]	2008	36	Female	N	21	RA and pSS	HCQ	response	Systemic steroids	8 d
		70	Male	N	20	RA	HCQ	response	Systemic steroids	12
		79	Female	N	20	polymyalgia rheumatica	HCQ	response	Systemic steroids	15
Park[14]	2010	38	Female	N	20	Dermatomyositis	HCQ	response	Systemic steroids	NA
Bailey[15]	2013	48	Female	N	14	SLE	HCQ	response	Systemic steroids	18 d
Zhang[16]	2015	60	Female	N	25	pSS	HCQ	response	Systemic steroids	14 d
Enos[17]	2020	29	Female	N	4	SJS	HCQ	response	Systemic steroids	38 d
Mohaghegh[18]	2018	44	Female	Y	5	Joint pain	HCQ	response	Systemic steroids	>52
Robustelli Test[19]	2020	70	Female	Y	10	Covid-19	HCQ	response	Systemic steroids	28

Supplemental Table 3. Number of patients in HCQ-induced AGEP. The analysis was conducted by fisher's exact test

	Corticosteroid-insensitive	Corticosteroid-sensitive
Targetoid lesions	8	2
Without targetoid lesions	2	8

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Supplemental Reference:

1. Yalçın B, Çakmak S, and Yıldırım B, Successful Treatment of Hydroxychloroquine-Induced Recalcitrant Acute Generalized Exanthematous Pustulosis with Cyclosporine: Case Report and Literature Review. *Ann Dermatol*, 2015; 27(4): p. 431-4.
2. Duman H, Topal IO, Kocaturk E, Cure K, and Mansuroglu I, Acute generalized exanthematous pustulosis induced by hydroxychloroquine: a case with atypical clinical presentation. *An Bras Dermatol*, 2017; 92(3): p. 404-406.
3. Castner NB, Harris JC, and Motaparathi K, Cyclosporine for corticosteroid-refractory acute generalized exanthematous pustulosis due to hydroxychloroquine. *Dermatol Ther*, 2018; 31(5): p. e12660.
4. Otake-Irie H, Nakajima S, Okamoto N, Toichi E, Nomura T, and Kabashima K, Prolonged acute generalized exanthematous pustulosis and atypical target-like lesions induced by hydroxychloroquine. *J Dermatol*, 2020; 47(11): p. e387-e388.
5. Matsuda-Hirose H, Sho Y, Yamate T, Nakamura Y, Saito K, Takeo N, et al., Acute generalized exanthematous pustulosis induced by hydroxychloroquine successfully treated with etretinate. *J Dermatol*, 2020; 47(2): p. e53-e54.
6. Coleman I, Ruiz G, Brahmbhatt S, and Ackerman L, Acute generalized exanthematous pustulosis and Stevens-Johnson syndrome overlap due to hydroxychloroquine: a case report. *J Med Case Rep*, 2020; 14(1): p. 210.
7. Sánchez-Velázquez A, Arroyo-Andrés J, Falkenhain-López D, Peralto JLR, Romero PLO, Díaz RR, et al., Hydroxychloroquine-induced acute generalized exanthematous pustulosis: an adverse reaction to keep in mind during COVID-19 pandemic. *J Dtsch Dermatol Ges*, 2021; 19(6): p. 896-898.
8. Meiss F, Helmbold P, Meykadeh N, Gaber G, Marsch W, and Fischer M, Overlap of acute generalized exanthematous pustulosis and toxic

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- epidermal necrolysis: response to antitumour necrosis factor-alpha antibody infliximab: report of three cases. *J Eur Acad Dermatol Venereol*, 2007; 21(5): p. 717-9.
9. Di Lernia V, Grenzi L, Guareschi E, and Ricci C, Rapid clearing of acute generalized exanthematous pustulosis after administration of ciclosporin. *Clin Exp Dermatol*, 2009; 34(8): p. e757-9.
 10. İslamoğlu ZGK and Karabağlı P, A case of recalcitrant acute generalized exanthematous pustulosis with Sjogren's syndrome: Successfully treated with low-dose cyclosporine. *Clin Case Rep*, 2019; 7(9): p. 1721-1724.
 11. Gualtieri B, Möbs C, Solimani F, Hertl M, and Pfützner W, Wirksamkeit des IL-17-Hemmers SECUKINUMAB bei akuter generalisierter exanthematische Pustulose (AGEP). *J Dtsch Dermatol Ges*, 2019; 17 Suppl 2: p. 22-24.
 12. Martins A, Lopes LC, Paiva Lopes MJ, and Rodrigues JC, Acute generalized exanthematous pustulosis induced by hydroxychloroquine. *Eur J Dermatol*, 2006; 16(3): p. 317-8.
 13. Paradisi A, Bugatti L, Sisto T, Filosa G, Amerio PL, and Capizzi R, Acute generalized exanthematous pustulosis induced by hydroxychloroquine: three cases and a review of the literature. *Clin Ther*, 2008; 30(5): p. 930-40.
 14. Park JJ, Yun SJ, Lee JB, Kim SJ, Won YH, and Lee SC, A case of hydroxychloroquine induced acute generalized exanthematous pustulosis confirmed by accidental oral provocation. *Ann Dermatol*, 2010; 22(1): p. 102-5.
 15. Bailey K, McKee D, Wismer J, and Shear N, Acute generalized exanthematous pustulosis induced by hydroxychloroquine: first case report in Canada and review of the literature. *J Cutan Med Surg*, 2013; 17(6): p. 414-8.
 16. Zhang Z and Liu X, Images in clinical medicine. Acute generalized exanthematous pustulosis. *N Engl J Med*, 2015; 372(2): p. 161.
 17. Enos T, Jeong HS, Vandergriff T, Jacobe HT, and Chong BF, Acute generalized exanthematous pustulosis induced by empiric

hydroxychloroquine for presumed COVID-19. *Dermatol Ther*, 2020; 33(6): p. e13834.

18. Mohaghegh F, Jelvan M, and Rajabi P, A case of prolonged generalized exanthematous pustulosis caused by hydroxychloroquine-Literature review. *Clin Case Rep*, 2018; 6(12): p. 2391-2395.
19. Robustelli Test E, Vezzoli P, Carugno A, Raponi F, Gianatti A, Rongioletti F, et al., Acute generalized exanthematous pustulosis with erythema multiforme-like lesions induced by Hydroxychloroquine in a woman with coronavirus disease 2019 (COVID-19). *J Eur Acad Dermatol Venereol*, 2020; 34(9): p. e457-e459.

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