

TABLE

Methotrexate-induced acral erythema cases in the literature.

case	age/ sex	chemotherapy regimen	disease	symptom	duration	treatment	effect of treatment	MTX clearance	renal insufficiency after chemotherapy	dose reduction of MTX after acral erythema	reference
1	13/M	MTX 12 g/m2 +DXR+CDDP	osteosarcoma	heel erythema,	1-7 days	topical moisturizers	N/D	normal	–	–	2)
2	17	MTX 12 g/m2 +DXR+CDDP+IFO	osteosarcoma	palmar and plantar erythema/bullae	N/D	–	spontaneous recovery	normal	N/D	reduction	3)
3	22	MTX 12 g/m2 +DXR+CDDP+IFO	osteosarcoma	palmar and plantar erythema/bullae	N/D	–	spontaneous recovery	normal	N/D	reduction	3)
4	12/M	MTX 12 g/m2 +DXR+CDDP	osteosarcoma	palmar and plantar erythema/bullae	7-21 days	topical moisturizers and systemic corticosteroid	effective	normal	N/D	–	4)
5	13/F	MTX 12 g/m2	osteosarcoma	palmar and plantar erythema/bullae,	1 day -	systemic corticosteroid	effective	delay	+	–	5)
6	15/M	MTX 5 g/m2+6MP	ALL	finger pulp erythema/bullae	3-10 days	N/D	N/D	normal	–	–	6)
7	7/M	MTX 5 g/m2 +AraC+LASP +CPA+6MP	ALL	finger pulp and heel erythema/bullae	4-11 days	N/D	N/D	normal	–	–	6)
8	7/M	MTX 3 g/m2 + AraC	BL	finger pulp erythema/bullae	15-22 days	N/D	N/D	normal	–	–	6)
9	13/M	MTX 2 g/m2	ALL	palmar, plantar and several other areas of body erythema/bullae	3-21 days	first therapy: topical moisturizers	first therapy: not effective	N/D	N/D	N/D	7)

						second therapy: IVIG	second therapy: effective				
10	12/M	MTX 1 g/m2 + AraC	ALL	palmar and plantar erythema/bullae	3-14 days	–	spontaneous recovery	N/D	N/D	–	8)
11	5/F	oral MTX (20 mg/m2/week) +6MP	ALL	palmar and plantar erythema/bullae	N/D	topical moisturizers and topical corticosteroid	minimal improvement	N/D	–	reduction	9)
12	15/M	MTX(dose unknown) +DXR+CDDP	osteosarcoma	palmar and plantar erythema/bullae	2-21 days	topical corticosteroid	not effective	delay	–	–	10)
13	16/M	MTX 1.5 g/m2	ALL/lymphoma	plantar erythema/bullae, maculopapular lesion over the legs and trunk	3-10 days	N/D	N/D	N/D	N/D	N/D	11)
14	12/M	MTX(dose unknown) +AraC	B-cell lymphoma	palmar and plantar erythema/bullae	2-14 days	N/D	N/D	N/D	N/D	N/D	12)
15	2/F	MTX 3 g/m2	ALL	palmar erythema/bullae, plantar and lower limb erythema	0-14 days	first therapy: systemic corticosteroid +epinastine +topical diphenhydramine second therapy: epinastine +topical corticosteroid	first therapy: not effective second therapy: not effective	delay	N/D	reduction	13)
our case1	6/M	MTX 2 g/m2+6MP	ALL	heel erythema/bullae	3-7 days	systemic corticosteroid	effective	normal	–	–	

our case2	12/M	MTX 5 g/m2+6MP	ALL	planter erythema/bullae	3-7 days	–	spontaneous recovery	normal	–	–	
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MTX, methotrexate; DXR, doxorubicin; CDDP, cisplatin; IFO, ifosphamide; AraC, cytosine arabinoside; L-ASP, L-asparaginase; CPA, cyclophosphamide; 6MP, mercaptopurine; ALL, acute lymphoblastic leukemia; BL, Burkitt lymphoma; N/D, no data