

Online supplemental Tables

Online supplemental Table 1a. The description of the overall demographics and the comparison of demographical parameters between groups. Categorical variables were compared using chi square test and non-parametric continuous variables were compared using Mann Whitney U test. $P < .05$ was accepted as statistical significant.

NA: not applicable

Demographic features	Total number of patients (n=107)	Patients with hand eczema (n=54)	Patients without hand eczema (n=53)	P-value
Patients with hand eczema, n (%)	54 (50.5)	54 (100)	0 (0)	NA
Gender				.033
Male, n (%)	35 (32.7)	12 (22.2)	23 (43.4)	
Female, n (%)	72 (67.3)	42 (77.8)	30 (56.6)	
Age, median (range)	28 (21-48)	29 (21-46)	27 (21-48)	.003
Mean	29.6±6.3	30.5±5.7	28.6±6.8	
Profession				.41
Physician, n (%)	47 (43.9)	24 (44.4)	23 (43.4)	
Nurse, n (%)	48 (44.9)	23 (42.6)	25 (47.2)	
Medical caretaker, n (%)	2 (1.9)	2 (3.7)	0 (0)	
Other, n (%)	10 (9.3)	5 (9.3)	5 (9.4)	
Workplace				.028
Inpatient clinic, n (%)	93 (86.9)	45 (83.3)	48 (90.6)	
Intensive care unit, n (%)	5 (4.7)	5 (9.3)	0 (0)	
Emergency unit, n (%)	9 (8.4)	4 (7.4)	5 (9.4)	
Work years, median (range)	3 (0.5-29)	5 (0.5-25)	2 (0.5-29)	<.001
Weekly work hours, median (range)	45 (24-80)	42.5 (24-80)	45 (24-80)	.44
Length of stay at COVID-19 units (day), median (range)	45 (7-90)	50 (10-70)	42 (7-90)	.99
History of personal atopy, n (%)	42 (39.3)	25 (46.3)	17 (32.1)	.19
Atopic dermatitis and/or atopic skin, n (%)	32 (29.9)	19 (35.2)	13 (24.5)	.32
History of familial atopy, n (%)	25 (23.4)	15 (27.8)	10 (18.9)	.39
History of metal allergy, n (%)	16 (15.0)	11 (20.4)	5 (9.4)	.19
History of glove allergy (Type 4), n (%)	13 (12.1)	6 (11.1)	7 (13.2)	.97
Generalized dry skin, n (%)	39 (36.4)	27 (50.0)	12 (22.6)	.006
History of hand eczema in the past year, n (%)	32 (29.9)	29 (53.7)	3 (5.7)	<.001
Additional housework at home, n (%)	58 (54.2)	41 (75.9)	17 (32.1)	<.001
Smoking status				.94
Nonsmoker, n (%)	68 (63.6)	35 (64.8)	33 (62.3)	
Smoker (current or ex-smoker), n (%)	39 (36.4)	19 (35.2)	20 (37.7)	

Online supplemental Table 1b. The descriptives of hand hygiene practices of the study population at workplace and at daily life and the comparison of two groups. Categorical variables were compared using chi square. $P < .05$ was accepted as statistically significant.

NA: not applicable

Hand hygiene practices	Total number of patients (n=107)	Patients with hand eczema (n=54)	Patients without hand eczema (n=53)	P-value
At workplace				
Frequency of hand washing				.023
<5 times a shift, n (%)	5 (4.7)	3 (5.6)	2 (3.8)	
5-10 times a shift, n (%)	9 (8.4)	1 (1.9)	8 (15.1)	
11-20 times a shift, n (%)	29 (27.1)	12 (22.2)	17 (32.1)	
>20 times a shift, n (%)	64 (59.8)	38 (70.4)	26 (49.1)	
Frequency of use of alcohol-based disinfectant				.84
<5 times a shift, n (%)	11 (10.3)	5 (9.3)	6 (11.3)	
5-10 times a shift, n (%)	27 (25.2)	13 (24.1)	14 (26.4)	
11-20 times a shift, n (%)	24 (22.4)	11 (20.4)	13 (24.5)	
>20 times a shift, n (%)	45 (42.1)	25 (46.3)	20 (37.7)	
Frequency of glove use				.13
<5 times a shift, n (%)	9 (8.4)	4 (7.4)	5 (9.4)	
5-10 times a shift, n (%)	12 (11.2)	3 (5.6)	9 (17.0)	
11-20 times a shift, n (%)	26 (24.3)	17 (31.5)	9 (17.0)	
>20 times a shift, n (%)	60 (56.1)	30 (55.6)	30 (56.6)	
Frequency of use of moisturizing creams after hand washing				.002
Never, n (%)	31 (29.9)	9 (16.7)	22 (41.5)	
<50%, n (%)	45 (42.1)	21 (38.9)	24 (45.3)	
50%, n (%)	21 (19.6)	16 (29.6)	5 (9.4)	
>50%, n (%)	7 (6.5)	5 (9.3)	2 (3.8)	
Always, n (%)	3 (2.8)	3 (5.6)	0 (0)	
At daily life				
Frequency of hand washing				.088
<5 times a day, n (%)	6 (5.6)	1 (1.9)	5 (9.4)	
5-10 times a day, n (%)	35 (32.7)	14 (25.9)	21 (39.6)	
11-20 times a day, n (%)	45 (42.1)	27 (50.0)	18 (34.0)	
>20 times a day, n (%)	21 (19.6)	12 (22.2)	9 (17.0)	
Frequency of use of alcohol-based disinfectant				.11
<5 times a day, n (%)	86 (80.4)	45 (83.3)	41 (77.4)	
5-10 times a day, n (%)	14 (13.1)	9 (16.7)	5 (9.4)	
11-20 times a day, n (%)	5 (4.7)	0 (0)	5 (9.4)	
>20 times a day, n (%)	2 (1.9)	0 (0)	2 (3.8)	

Frequency of use of moisturizing creams after hand washing				<.001
Never, n (%)	46 (43.0)	6 (11.1)	40 (75.5)	
<50%, n (%)	33 (30.8)	23 (42.6)	10 (18.9)	
50%, n (%)	16 (15.0)	15 (27.8)	1 (1.9)	
>50%, n (%)	5 (4.7)	4 (7.4)	1 (1.9)	
Always, n (%)	7 (6.5)	6 (11.1)	1 (1.9)	
Preventive and therapeutic measures in patients with hand eczema (n=45)				
Use of moisturizing creams before the development of hand eczema, n(%)				
Yes	26 (57.8)	26 (57.8)	NA	NA
No	19 (42.2)	19 (42.2)	NA	
Frequency of use of moisturizing creams after the development of hand eczema, n(%)				
More frequent	36 (80)	36 (80)	NA	NA
Not changed	8 (17.8)	8 (17.8)	NA	
Less frequent	1 (2.2)	1 (2.2)	NA	
Frequency of handwashing and use of alcohol-based disinfectant after hand eczema, n(%)				
More frequent	4 (8.9)	4 (8.9)	NA	NA
Not changed	28 (62.2)	28 (62.2)	NA	
Less frequent	13 (28.9)	13 (28.9)	NA	
Use of topical corticosteroid for hand eczema treatment, n(%)				
Yes	16 (35.6)	16 (35.6)	NA	NA
No	29 (64.4)	29 (64.4)	NA	

Online supplemental Table 2. Multivariate analysis for identifying independent risk factors associated with hand eczema. Logistic regression analysis was used to define independent risk factors. OR: Odds ratio, 95%CI: 95% confidence interval.

Variables	<i>P</i>-value	OR	95%CI
Female gender	.89	0.90	0.20-4.12
Age >28	.11	2.68	0.80-8.93
Working years >3	.62	1.46	0.33-6.48
Generalized dry skin	.91	1.10	0.24-4.92
Hand washing >20 per day at work	.051	3.28	0.995-10.8
Use of moisturizing hand cream at work	.18	2.49	0.66-9.30
Use of moisturizing hand cream at daily life	<.001	22.1	6.33-77.0
Houseworking	.75	1.26	0.31-5.15
History of hand eczema in the past year	<.001	18.5	3.82-89.9

Online supplemental Table 3. Clinical characteristics of hand eczema

According to patient's history of a confirmed diagnosis by patch testing in the past

HECSI: Hand eczema severity index

§HECSI 0-11 points: mild eczema, 12-27 points: moderate eczema, >27 points: severe eczema

Clinical features	n=54
One hand, n (%)	2 (3.7)
Both hand, n (%)	52 (96.3)
Clinical type	
Irritant contact dermatitis, n (%)	52 (96.3)
<input type="checkbox"/> Allergic contact dermatitis, n (%)	2 (3.7)
Morphology	
Dyshidrotic/vesicular, n (%)	3 (5.6)
Erythema-squamatus, n (%)	41 (75.9)
Hyperkeratotic/rhagadiform, n (%)	7 (12.9)
Combined morphology, n (%)	3 (5.6)
Localizations	
Palm, n (%)	11 (20.4)
Dorsum, n (%)	46 (85.2)
Finger webs, n (%)	10 (18.5)
Sides of finger, n (%)	4 (7.4)
Fingertips, n (%)	8 (14.8)
Hand and wrist, n (%)	4 (7.4)
Periungual eczema and nail eczema, n (%)	2 (3.7)
Pruritus, n (%)	39 (72.2)
HECSI, median (range)	24 (3-84)
§Eczema severity	
Mild, n (%)	13 (24.1)
Moderate, n (%)	20 (37.0)
Severe, n (%)	21 (38.9)