Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

with more equal smartphone access across race and income. While only video telehealth visits were reimbursed before the pandemic, the Centers for Medicare & Medicaid Services expanded the reimbursement during the pandemic to include telephone visits.[5] Our study highlights the importance of maintaining the coverage of audio-only visits, especially for the underserved communities. Future studies should evaluate the differential quality between audio-only and video visits for acne or other diagnoses. The study limitations include experience of a single institution and diagnosis, which may limit generalizability, and the possibility that patients with audio-only visits had submitted photographs beforehand for review.

Our study provides the evidence that the non-English speaking and elderly patients were more likely to use audio-only visits, suggesting that non-video telemedicine alternatives may facilitate access to care for these populations. Future efforts should ensure to continue the ongoing reimbursement coverage for audio-only visits as a modality of telemedicine offered to those with barriers to video use.

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Clinical manifestations and patch test results for facial dermatitis associated with disposable face mask use during the COVID-19 outbreak: A case-control study

To the Editor: Due to the recent COVID-19 pandemic, people are wearing disposable masks more often than ever. The prolonged use of disposable masks has markedly increased cases of facial dermatitis, including irritant contact dermatitis, allergic contact dermatitis, and exacerbations of preexisting atopic dermatitis.[1] Patch tests help differentiate possible etiologies and exclude allergic contact dermatitis; however, objective data are lacking to help determine the validity of positive allergens.[2] Here, we undertook an observational study to investigate the clinical manifestation and patch test results of patients with facial dermatitis induced by wearing disposable masks.

Korean patients older than 18 years of age with facial dermatitis diagnosed by dermatologists from the Department of Dermatology at Kangnam Sacred Heart Hospital after the outbreak of COVID-19 between January 2020 and July 2020 were included in the study. Clinically, 27 patients whose lesions and symptoms worsened after wearing a mask wereestablished as the mask group and 70 patients who developed facial dermatitis due to other causes were established as the control group. Both groups were recruited and distinguished using a questionnaire.[2] Demographic features, clinical manifestations, objective bioengineering measurements (transepidermal water loss and stratum corneum hydration), and patch test (Korean standard series)[3] results were analyzed in this study.

The mean duration of disease was 6.24 months among the patients in the mask group and 22.87 months in the control group (Table I). The

Table I. Comparison between mask group and group induced by other causes with clinical manifestation

Clinical manifestation	Induced by mask (n = 27)	Induced by other causes (n = 70)
Disease duration, mean (SD), month*	6.24 ± 6.00	22.78 ± 30.37
Mean stratum corneum hydration (SD), A.U.	61.93 ± 21.03	58.94 ± 19.33
Mean TEWL (SD), g/m^2/hr	16.98 ± 6.53	21.11 ± 20.88
Patients, Number (%)		
Distribution*		
Centrofacial	18 (66.66)	9 (33.33)
Peripheral	45 (64.28)	25 (35.71)
Location of eczematous skin lesions		
Forehead	8 (29.62)	23 (32.85)
Nose	3 (11.11)	7 (10)
Perioral	6 (22.22)	17 (24.28)
Chin*	4 (14.81)	4 (5.71)
Ears	4 (14.81)	10 (14.28)
Cheek	13 (48.14)	38 (54.28)
Others	3 (11.11)	8 (11.42)
Cutaneous signs		
Erythema	19 (70.37)	46 (65.71)
Hyperkeratosis*	6 (22.22)	3 (4.28)
Pustule	3 (11.11)	18 (25.71)
Papule	6 (22.22)	22 (31.42)
Excoriation	0	2 (2.85)
Vesicle	2 (7.40)	10 (14.28)
Xerosis*	3 (11.11)	1 (1.42)
Hyperpigmentation	1 (3.70)	10 (14.28)
Edema*	2 (7.40)	0
Cutaneous symptoms		
Itching	15 (55.55)	51 (72.85)
Flushing*	6 (22.22)	4 (5.71)
Stinging/heating sensation	4 (14.81)	11 (15.71)

Each patient has 1 or more skin lesions, cutaneous signs, or symptoms.
A.U., Arbitrary unit; *SD*, standard deviation; *TEWL*, transepidermal water loss.
*P value $< .05$.

Table II. Comparison between the mask group and control group in the patch test results

Patch test items	Induced by mask (n = 27)	Induced by other causes (n = 70)
1. Nickel (II) sulfate hexahydrate	15 (55.55%)	31 (44.28%)
2. Lanolin alcohol (wool alcohol)	1 (3.70%)	2 (2.85%)
3. Neomycin sulfate	0	2 (2.85%)
4. Potassium dichromate*	7 (25.92%)	7 (10%)
5. Mercury ammonium chloride	0	5 (7.14%)
6. Fragrance mix I	1 (3.70%)	6 (8.57%)
7. Colophonium	1 (3.70%)	2 (2.85%)
8. Imidazolidinyl urea	0	1 (1.42%)
9. Clinquinol	0	1 (1.42%)
10. Myroxylon pereirae resin (Balsam Peru)	2 (7.40%)	4 (5.71%)
11. IPPD	2 (7.40%)	0
12. Cobalt (II) chloride hexahydrate	3 (11.11%)	2 (2.85%)
13. PTBP*	4 (14.81%)	0
14. Paraben mix	1 (3.70%)	0
15. Captan	2 (7.40%)	3 (4.28%)
16. Budesonide	0	2 (2.85%)
17. Methylisothizolinone + methylcholoroisothizolinone	0	1 (1.42%)
18. Quaternium-15	1 (3.70%)	0
19. MBT	0	1 (1.42%)
20. PPD	0	7 (10%)
21. Formaldehyde	3 (11.11%)	2 (2.85%)
22. Mercapto mix	1 (3.70%)	1 (1.42%)
23. Thimerosal	4 (14.81%)	5 (7.14%)
24. Thiuram mix	1 (3.70%)	1 (1.42%)
25. Tixocortol-21-pivalate	0	1 (1.42%)

IPPD, N-Isopropyl-N-pheynyl-4-phenylenediamine; *MBT*, 2-Mercaptobenzothiazole; *PPD*, p-phenylenediamine; *PTBP*, 4-tert-butylphenol-formaldehyde resin.
*P value $< .05$.

distribution of skin lesions was similar in both groups except for the chin area, where skin lesions were more frequently observed in the mask group (14.81%; 4 of 27 patients). Erythema and papules were the most common characteristics of the skin lesions in both groups; however, hyperkeratosis (22.22%; 6 of 27) and xerosis (11.11%; 3 of 27) were significantly more frequent in the mask group.

In patch test results (Table II), the mask patch tested positive more frequently to potassium dichromate (25.92%; 7 of 27) and 4-tert-butylphenol-formaldehyde resin (14.81%; 4 of 27). Positive reactions to N-isopropyl-N-phenyl-4-phenylenediamine (7.40%; 2 of 27), formaldehyde (11.11%; 3 of 27), and thimerosal (14.81%; 4 of 27) were more common in the mask group, but the difference was not statistically significant. Interestingly, these substances are known components of disposable facial masks. In addition, 11 patients in the control group (15.71%; 11 of 70) had negative reactions to all the items in the patch tests, while only 1 patient in the mask group did (3.70%; 1 of 27).

These results would infer that the chemical components of disposable masks and residues of disinfectants or cosmetics can cause allergic and irritant reactions. Further, given the occlusive, humid environment within a facial mask, it can be assumed that these substances could more easily penetrate the skin and cause facial dermatitis.

Since the COVID-19 pandemic started, our living and medical environments have significantly changed, as have the frequency and types of exposure to allergens.[4,5] Consequently, patch tests are essential for determining the correct diagnosis in patients with facial dermatitis. Our study could be a useful index for determining the causative allergens in patients with facial dermatitis induced by disposable masks.

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Delayed skin cancer diagnosis in 2020 because of the COVID-19–related restrictions: Data from an institutional registry

To the Editor: During 2020, restrictions applied to limit COVID-19 dissemination radically modified health care services. In Greece, during the lockdown introduced in March, the routine functions of dermatology outpatient clinics were suspended, prioritizing only emergencies, including lesions suspicious for skin cancer, because of rapid growth or clinicians' referrals. This resulted in a reduction in the number of patients examined by approximately 80%. Limited routine diagnostic procedures restarted after 2 months until late October, when a new lockdown was imposed because of a second COVID-19 outbreak.

These health care disruptions raised worldwide concerns about their potential impact on early cancer diagnosis and flow-on effects on morbidity and mortality.[1,2] A United Kingdom-based modeling study demonstrated an up to 10% increase in mortality due to common neoplasms.[2,3]

We retrieved data from an institutional skin cancer registry in Northern Greece to assess the impact of the pandemic on skin cancer diagnosis. We compared the observed and expected numbers of new melanomas (per stage), basal cell carcinomas, and squamous cell carcinomas in 2020. The expected incidence of each tumor and melanoma stage was calculated as the mean of the previous 4 years (2016-2019), assuming that the incidence would remain stable in 2020.[4]

The analytical results are shown in Table I and Fig 1. The total number of new skin cancers was 30.1% lower than the expected number. The reduction was 36.4%, 22.3%, and 44.8% for melanoma, basal cell carcinoma, and squamous cell carcinoma, respectively. Melanoma and basal cell carcinoma patients were significantly younger at the time of diagnosis in 2020 than those in previous years, and a similar trend was found for squamous cell carcinoma patients, reflecting the increased concerns regarding COVID-19 among elderly individuals. Similarly, a higher-than-expected female representation may mirror the increased fear of severe COVID-19 consequences among men.