#### **ORIGINAL ARTICLE**

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# The most common pediatric and adult dermatology patient complaints in a month of the COVID-19 pandemic in Turkey

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#### Abstract

Severe acute respiratory syndrome coronavirus 2 is the coronavirus strain that causes coronavirus disease 2019 (COVID-19). The World Health Organization (WHO) has designated the ongoing COVID-19 outbreak a Public Health Emergency of International Concern. WHO declared COVID-19 as a pandemic on 11 March 2020. During the pandemic and lockdown period, many dermatologic clinics were temporarily closed in Turkey as well as all over the world. Taking the necessary precautions, the hospital continued to examine all emergent and elective patients who applied to our dermatology clinic. We investigated the most common reasons for admission of pediatric and adult patients who were admitted to our outpatient clinic between 30 March and 30 April 2020, the period with the highest number of COVID-19 patients in Turkey. In children and adult age groups, the most common reason for admission was acne (N: 10 [16.4%] and N: 89 [20.9%], respectively). Of the 99 acne patients, 70 (70.7%) were using systemic isotretinoin and applied to our clinic to repeat the prescription or continue the agent. The number of pediatric patients admitted to the dermatology department drastically reduced during the lock-down period, which was attributed to the curfew for children in the country.

KEYWORDS acne, COVID-19, dermatology, pandemic

## 1 | INTRODUCTION

As of 31 December 2019, several cases of pneumonia of unknown etiology had been reported in Wuhan, Hubei Province, China. A new coronavirus pathogen was identified as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and the SARS-CoV-2 infection outbreak was named coronavirus disease 2019 (COVID-19) by the World Health Organization (WHO). On 11 March 2020, WHO declared a rapidly spreading novel coronavirus (COVID-19) outbreak as a global pandemic. The main clinical symptoms are fever, headache, cough, and muscle pain.<sup>1,2</sup> More than 200 000 cases have been reported worldwide until mid-March 2020.<sup>3</sup> The new coronavirus was officially identified in Turkey for the first time on 11 March 2020. The Turkish government announced a curfew for people over the age of 65 years on 21 March 2020 and on 3 April 2020, for people under the age of 20 years. During the lockdown period, there was a

reduction in the number of patients admitted to dermatology clinics in Turkey, as in every country.

The aim of the current research was to provide epidemiologic data and management strategies for the patients admitted to the dermatology clinic during the COVID-19 outbreak.

### 2 | MATERIALS AND METHODS

Patients who directly applied to Medipol Mega University Hospital dermatology outpatient clinic between 30 March and 30 April 2020 were included in this retrospective study. Consultation patients and patients who applied to other clinics before our clinic were excluded from the study. The patients were divided into two groups: 0 to 17 years (pediatric population) and 18 years and older (adult population). The name, surname, age, gender, patient complaint, and medical history of

the individuals included in the study were recorded and obtained from the hospital's computer-based database. Clinical features, dermatologic features, treatment protocols, and follow-up were investigated.

#### 3 | RESULTS

On average, a total of 3000 patients (500 children and 2500 adult patients) apply to our outpatient clinic monthly. Between 30 March and 30 April 2020, a total of 61 patients in the pediatric age group (30 boys and 31 girls) and a total of 425 patients in the adult age group (221 men and 204 women) applied to our outpatient clinic.

The mean age of the patients in the pediatric age group was  $8.4 \pm 4.9$  years (range: 1 month-17 years) and in the adult age group was  $34.4 \pm 14$  years (range: 18-97 years). In total, 106 patients were already diagnosed and were on medical therapy. The reason for their admittance was the prescription of their medications. Sixty-three of the 425 adult patients (14.8%) and seven of the 61 children (11.5%) were receiving systemic isotretinoin treatment for acne. Sixty-six of the 425 adult patients had urticaria (15.5%) and 36 (8.5%) were receiving omalizumab treatment.

The most common new-onset diagnosed diseases in the pediatric age group were acne (N: 10, 16.4%), scabies (N: 4, 6.6%), atopic dermatitis (N: 5, 8.2%), other eczematous eruptions (N: 6, 9.8%), and

**TABLE 1**Diseases of patients aged 17 years and younger whoapplied to the dermatology outpatient clinic

Disease	Number of patients	Percentage
Urticaria	3	4.9
Acne	10	16.4
Superficial fungal infections	3	4.9
Psoriasis	1	1.6
Pruritus	2	3.3
Telogen effluvium	2	3.3
Verruca vulgaris	2	3.3
Scabies	4	6.6
Atopic dermatitis	5	8.2
Diaper dermatitis	4	6.6
Other eczematous eruptions	6	9.8
Pityriasis rosea	3	4.9
Bacterial infections	4	6.6
Alopecia areata	3	4.9
Zona zoster	1	1.6
Herpes infections	1	1.6
Infantile hemangioma	1	1.6
Recurrent aphthous stomatitis	1	1.6
Nail diseases	2	3.3
Drug eruptions	1	1.6
Varicella	1	1.6
Molluscum contagiosum	1	1.6

diaper dermatitis (N: 4, 6.6%) (Table 1). The most common new-onset diagnoses in the adult population were acne (N: 89, 20.9%), types of dermatitis (N: 64, 15.1%), superficial fungal infections (N: 36, 8.5%), urticaria (N: 66, 15.5%), and scabies (N: 28, 6.6%) (Table 2).

TABLE 2	Diseases of patients aged 18 years and older who	
applied to the dermatology outpatient clinic		

applied to the definatology outpat	Number of	
Disease	patients	Percentage
Urticaria	66	15.5
Acne	89	20.9
Superficial fungal infections	36	8.5
Psoriasis	14	3.3
Pruritus	20	4.7
Telogen effluvium	8	1.9
Verruca vulgaris	11	2.6
Scabies	28	6.6
Types of dermatitis	64	15.1
Vitiligo	3	0.7
Pityriasis rosea	9	2.1
Bacterial infections	9	2.1
Alopecia areata	4	0.9
Zona zoster	11	2.6
Herpes infections	6	1.4
Callus	2	0.5
Syphilis	3	0.7
Rosacea	2	0.5
Hidradenitis suppurativa	2	0.5
Androgenic alopecia	2	0.5
Lichen planus	2	0.5
Anogenital verruca	4	0.9
Drug eruptions	2	0.5
Recurrent aphthous stomatitis	3	0.7
Melasma	3	0.7
Autoimmune blistering disease	2	0.5
Amyloidosis	1	0.2
Actinic keratosis	2	0.5
Nail diseases	1	0.2
Cicatricial alopecia	1	0.2
Malign melanoma	1	0.2
Keloid scars	1	0.2
Skin tags	5	1.2
Pyogenic granuloma	1	0.2
Molluscum contagiosum	1	0.2
Xerosis	2	0.5
Varicella	2	0.5
Confluent and reticulated papillomatosis	1	0.2
Thermal burn	1	0.2

This article describes pediatric and adult patients admitted to a private university hospital's dermatology outpatient clinic in Istanbul, which was announced to be among the pandemic institutions in Turkey during the COVID-19 outbreak. Turkey has many dermatology clinics that closed their doors temporarily in this period. Our dermatology clinic continued to take care of patients while taking all the necessary precautions. The number and percentage of pediatric patients admitted to the dermatology clinic during the pandemic period drastically reduced, which can be attributed to the curfew in the country. The total number of outpatients decreased by one-sixth when compared with the number of admissions on a regular basis.

According to our study, 63 of 89 adult patients with acne and seven of 10 pediatric patients with acne were receiving isotretinoin treatment, and these patients applied for the repetition of their prescription. A total of 36 of 66 adult patients with urticaria were receiving omalizumab treatment and applied to have the medicine prescribed. Only one of the patients receiving omalizumab had active lesions. Approximately, a quarter of the patients applied to our clinic during the 1-month pandemic for the continuation of their medications.

As previously indicated by Tan and Bhate,<sup>4</sup> the prevalence of acne is 9.4%, but the rate was 23.3% in our study during the epidemic period. This rate was found to be 24.1% in the 1-week pandemic period by Cengiz et al.<sup>5</sup> Most of the patients who applied to our clinic did not have active lesions and applied to our hospital to have systemic isotretinoin prescribed. According to our study, 17 of 64 adult patients with dermatitis had rashes on their hands, and all of them had a history of frequent hand washing and disinfectant use. Intensive hand washing and disinfection usage can disrupt epidermal barrier functions and cause irritant contact dermatitis.<sup>6</sup> Atopic diathesis, low humidity, increased frequency of handwashing, use of gloves, and working time are risk factors for the development and/or exacerbation of hand dermatitis.<sup>7</sup> Three out of 14 psoriasis patients applied to have biologic agents prescribed. Our oldest patient was 97 years and applied to our clinic because of zona zoster infection. There is supporting evidence that stressful events may be a risk factor for patients with zona zoster infection.8

Cosmetic and nonurgent surgical procedures were not performed due to the risk of contamination. Patients with dermatologic diseases may increase the risk of developing infections, as diseases with epidermal barrier disruption can increase virus acquisition through indirect contact.<sup>9</sup>

Most of the patients wore masks. Doctors and other medical staff wore masks, gloves, and scrubs and used disinfectants. The use of a hygienic mask may not provide adequate protection from virus contamination, and COVID-19 has a relatively low resistance to disinfectants.<sup>10</sup> A range of disinfection options can be employed—varying from having a hot water bath at 56°C for 30 minutes to using 75% ethanol, chlorine, peracetic acid, and ultraviolet light disinfection.<sup>10</sup>

## 5 | CONCLUSION

In conclusion, patients with nonurgent needs continue to apply to the dermatology outpatient clinic despite the stay-at-home orders, the importance of social distancing, and a partial curfew. Children and adult patients were admitted to the dermatology outpatient clinic during the months of the COVID-19 pandemic in Turkey compared to the period before the pandemic.

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