# Bullous Pemphigoid: Management during COVID-19 Pandemic

**Abstract**

Bullous pemphigoid (BP) is an autoimmune blistering disorder with subepidermal split, which predominantly affects the elderly. Here, we report a case of BP with hypertension and bronchial asthma managed during coronavirus disease-2019 national lockdown. A known case of BP in remission for 10 months came with recurrence. The patient was managed with dapsone and topical corticosteroids. Social media application was utilized further to prescribe and monitor the patient due to inconvenience faced during the current pandemic.

**Keywords:** *Bullous pemphigoid, coronavirus disease-2019, dapsone*

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## Introduction

Bullous pemphigoid (BP) is an autoimmune blistering disorder with subepidermal split, which predominantly affects the elderly. A large number of BP patients may also have co-morbid conditions concurrently. The management of BP in such patients in the current novel coronavirus disease-2019 (COVID-19) pandemic poses various challenges. Herein, we report how a case of BP with hypertension and bronchial asthma was managed during COVID-19 national lockdown.

## Case Report

A 67-year-old female residing about 200 km from our center presented with the development of multiple tense vesicles and bullae affecting the trunk, upper and lower limbs for 20 days [Figure 1]. She also had a history of urticarial lesions and severe itching before the onset of blisters. She is a known case of hypertension and bronchial asthma on regular treatment with telmisartan, amlodipine, hydrochlorothiazide, and inhalational bronchodilators, respectively. The patient had consulted us one and half years back with similar complaints and was diagnosed with BP following histopathology and direct immunofluorescence confirmation. Considering the age and comorbidities of the patient, she was treated with two infusions of rituximab 1 g at an interval of 2 weeks. The patient was then prescribed deflazacort, nicotinamide 250 mg twice daily, and topical clobetasol propionate cream. Deflazacort was gradually tapered over a period of 8 weeks and stopped. Nicotinamide was continued for 8 months and then stopped. The patient was in complete remission and off all medications for 10 months before the onset of current lesions.

## Discussion

### Challenges encountered

With the present COVID-19 pandemic, we had to ponder multiple issues before starting therapy. Approximately 15% of body surface area was affected, which necessitated systemic therapy. An increased incidence of COVID-19 associated mortality has been reported in the older age group, particularly those with comorbidities.[1] Our patient was also an elderly with hypertension and bronchial asthma. The patient hailed from a far-off place, and it was difficult for her to come frequently for follow-up because of restricted inter-district travel imposed due to COVID-19 induced total national lockdown. The patient was screened at the entrance of the hospital, where she recorded a normal temperature in the infrared thermometer and did not have any personal or family history of flu-like symptoms. The patient was advised regarding proper coverage of face with the mask and then directed towards the treating doctor for her



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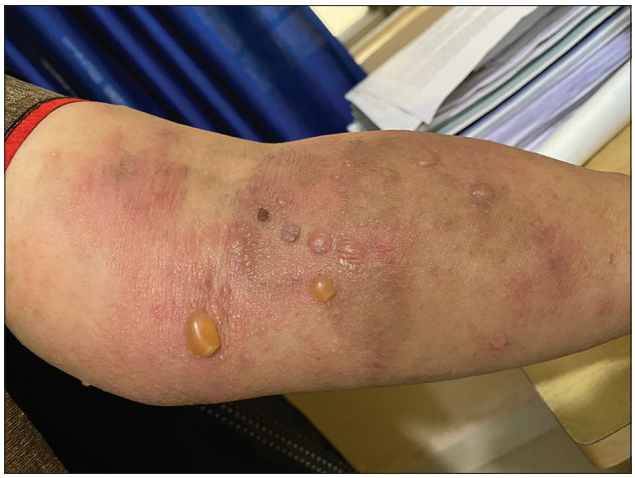

**Figure 1: Multiple bullae over an erythematous base**

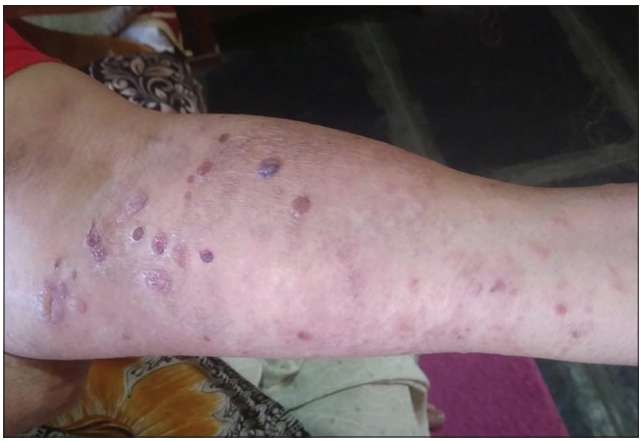

**Figure 2: Multiple dry erosions and crusted lesion 4 days after starting Dapsone**

skin ailment where one patient was seen at a time. Social distancing was maintained while sitting in the waiting area with other patients.

The patient was seated at an adequate distance to maintain safe space between the patient and the doctor while a transparent screen was placed inbetween. Other protective measures such as gloves, mask, and face shields was worn by the doctor while examining the patient.

### Management of challenges

We did a baseline complete hemogram, and the reports turned out to be normal. Glucose-6-phosphate dehydrogenase test was not performed considering the low prevalence of G6PD deficiency in this part of the country (Karnataka, India).[2,3] We started the patient on dapsone 100 mg/day, hydroxyzine 25 mg twice daily, and clobetasol propionate 0.05% cream for once-daily application. Dapsone was advised as it is a drug of second choice in the therapeutic ladder of BP treatment and is not associated with immunosuppression.[4] Systemic steroids and other immunosuppressants were not preferred as our patient was hypertensive, and they can increase the susceptibility to infections. Clobetasol propionate was also advised as the efficacy of superpotent topical corticosteroids in the treatment of BP has been well established.[4-6] The patient was asked to repeat a complete hemogram at her place after 1 week and send the report along with the latest clinical photographs of the lesions through "WhatsApp," a commonly used Internet-based multimedia messaging application. The investigations were again within the normal limits. The patient was asked about the condition of the lesions over telephonic call, and she reported a marked improvement with the development of no new lesions and drying of the existing lesions, which was evident in the images she had sent [Figure 2]. The patient was advised to continue the same medications for a month and then follow-up.

Further plan of management was to advice the patient to visit us once in 2 months or earlier if there is extensive involvement. This is done to reduce the burden of traveling during the pandemic, frequent follow-ups and also to reduce her exposure to other potential COVID-19 patients during travel as well as at the hospital. The patient would also be advised to consult us in case of any query, with the help of the WhatsApp application so that we can continue to give quality care under supervision.

### Learning points

Although direct physical examination is the gold standard in diagnosing dermatological conditions, telemedicine through social media applications such as WhatsApp can be a useful tool for the management of nonemergency cases in special situations such as the ongoing pandemic.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

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