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**COVID-19: Important updates and developments**  
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# Impact of COVID-19 pandemic on the management of cutaneous lymphomas



**Valeria Mateeva, MD, PhD\*, Snejina Vassileva, MD, PhD**

*Department of Dermatology, Medical University–Sofia, Sofia, Bulgaria*

To the Editor:

In these challenging times, efforts of health care professionals and medical resources worldwide are directed to respond to the coronavirus disease 2019 (COVID-19) pandemic. In response to this unprecedented crisis, health care systems have been rapidly restructured to handle the overload of patients with COVID-19. At the same time, patients who suffer from nonemergent but potentially life-threatening chronic conditions such as malignant lymphomas are at risk to be left with unmet medical needs.

Primary cutaneous lymphomas (PCLs) are defined as a heterogeneous group of T- and B-cell non-Hodgkin lymphomas that localize to the skin without extracutaneous involvement at the time of the diagnosis. They present the second most common form of extranodal lymphomas. Mycosis fungoides (MF) is the most common type of PCL, with indolent clinical course in early patch and plaque stages (IA to IIA), and more aggressive behavior in advanced tumor and erythrodermic disease (stages IIB to IVB).<sup>1</sup> We present two example cases of MF whose management has been complicated by the COVID-19 pandemic.

## Illustrative patients

Case 1 is a 61-year-old man with patch/plaque-stage MF, whose histopathologic examination had been delayed by 3 months, owing to the transformation of the dermatology clinic into a COVID-19 unit and the respective closure of the

dermato-pathologic laboratory. At first, the patient presented in a dermatology consultation at the beginning of March 2020 with few asymptomatic, erythematous, ill-defined patches and plaques with fine scaling, located on the abdomen, trunk, and buttocks. No lymphadenopathy was present. The patient had a family history of psoriasis, and the presumed diagnosis was psoriasiform dermatitis/pre-MF/MF (Figure 1a). Laboratory investigation findings at that time, including full blood count, chest X ray, abdominal-pelvic ultrasonography, and renal and liver function tests, were all normal. Skin biopsy and histologic confirmation of MF were obtained only in June 2020 (Figure 1b); meanwhile, the patient has been treated with topical corticosteroids. Phototherapy, which is one of the key treatments for patients with early stage MF,<sup>2</sup> was by consequence postponed, because no ambulatory procedures were allowed in the department due to the restrictions for the COVID-19 infection.

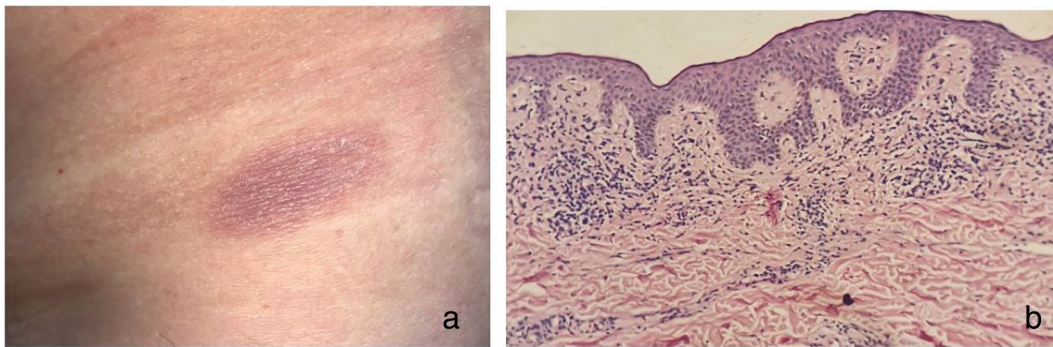
Case 2 is a 51-year-old woman who has been diagnosed with tumor stage MF (stage IIB) in January 2020, with a single positron emission tomography/computed tomography–active tumor lesion on the back (Figure 2a). In March 2020, she underwent successful local radiation therapy (25 Gy in five fractions) with satisfactory effect (Figure 2b). In May 2020, the disease rapidly worsened with the appearance of multiple new tumor lesions suggestive of large cell transformation of MF (Figure 2c). Due to the national emergency state, admission to the hematology department for restaging and systemic therapy was postponed by 2 months.

## Conclusions

The COVID-19 outbreak may put patients with cutaneous lymphomas at additional risk of not receiving the necessary

\* Corresponding author.

E-mail address: [vali\\_mateeva@hotmail.com](mailto:vali_mateeva@hotmail.com) (V. Mateeva).



**Fig. 1** A, Erythematous brownish patches and plaques involving less than 10% of body surface (Ia stage mycosis fungoides; T1N0M0B0). B, Histology of the same lesion, revealing epidermotropism, lymphocyte alignment at the basement membrane zone, and Pautrier's microabscesses (hematoxylin and eosin,  $\times 100$ ).



**Fig. 2** Disease course before and after radiotherapy: A, initial solitary tumor lesion on the back; B, almost complete disappearance after radiotherapy; C, disease progression and dissemination with multiple tumorous nodules 2 months later.

diagnostic procedures and treatment, because they cannot access hospitals easily or due to limitations of health care resources. Several guidelines for the management of cutaneous lymphoma have been recently published to help dermatologists choose the right approach in the COVID-19 pandemic<sup>3-5</sup>; however, these guidelines happen to be not applicable in countries that are under complete lockdown. We would like to draw attention to the indirect damage that COVID-19 is causing to the public health, where diagnosis and relevant treatment of manageable diseases is delayed,

thus causing potential disease worsening, even death. According to our experience, these unmet medical needs concern both patients with low-grade MF and those with more aggressive clinical course.

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