Dear Editor,

Coronavirus disease (COVID-19) of 2019 caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was declared as a pandemic by the World Health Organization on March 11, 2020. Currently, it continues to exist as a global problem. While screening the people contacted with a patient diagnosed as COVID-19 infection, we identified a 58-year-old male with a positive polymerase chain reaction (PCR) for SARS-CoV-2. At the time of diagnosis, the patient did not have any infection-related complaints. However, the computed tomography scan of the chest was typical of COVID-19. Ground glass opacities were observed in both lung parenchyma. On the fourth day of hospitalization, an erythematous purpuric rash developed unilaterally in the left inguinal region. The lesions did not blanch with pressure (Figure 1). No itching, burning, or pain accompanied the lesions. At the time of admission to the hospital, hydroxychloroquine and enoxaparin sodium were initiated. The patient did not have any known chronic diseases and did not use any other medication regularly. Additionally, he had no history of exposure to a contact allergen that might cause a reaction in the area of the lesions. Laboratory tests for hemogram, biochemistry, and hematology were within normal limits. His hemoglobin level was 14.8 g/dL, platelet count was 209 × 10^5/UL, eosinophil count was 0.062 × 10^3/UL, international normalized ratio was 1.09, and partial thromboplastin time was 36.5 seconds. The examination of the skin biopsy specimen revealed extravasated red blood cells in the superficial dermis along with peripheral lymphocytic dermatitis around the vessels extending to the middle layers of the dermis. The patient was started topical treatment with mometasone furoate cream once a day and followed up. The complaints fully resolved in 5 days.

Several symptoms of COVID-19 have been reported so far; including fever, fatigue, myalgia, headache, diarrhea, dry cough, and dyspnea that may lead to acute respiratory distress syndrome and death. SARS-CoV-2 uses angiotensin-converting enzyme 2 (ACE2) receptors to enter the cell. The expression of ACE2 receptors in the skin and blood vessels has been shown to correlate with the immune status of patients. However, the cutaneous effects of the infection have not been clarified yet. Furthermore, no evidence exists that the degree of cutaneous involvement is related to the severity of the disease. Previous studies report cutaneous involvement in a range from 0.2% to 20%. Based on the growing reports in the literature, we can argue that cutaneous symptoms of the new coronavirus are similar to those of other common viral infections. Two different mechanisms are primarily suggested to explain cutaneous lesions. The first is the immune response to the viral infection, manifesting with morbilliform rash, petechial rash, erythematous-to-purpuric coalescing macules, widespread urticaria, and varicella-like vesicles. The other one is associated with vasculopathy, manifesting with peripheral cyanosis with bullae and dry gangrene, transient unilateral livedo reticularis, and red papules on fingers resembling chilblains. When evaluating cutaneous lesions in patients with COVID-19 infection, drug eruptions should be firstly considered in the differential diagnosis. In our patient, the lesion was unilaterally located in one groin, and there were very few eosinophils in the histologic evaluation of specimens. Therefore, we think that this rash suggest an immune reaction against SARS-CoV-2. The unilaterality of the rash limited to one body region of the patient was noteworthy. Moreover, the asymptomatic course of these lesions shows the importance of the identification of such cutaneous lesions of COVID-19, especially in asymptomatic patients in the process of spending efforts to control the pandemic. Further studies are needed to confirm and better understand the cutaneous effects of COVID-19.

CONFLICT OF INTEREST
The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS
K.Z. has made substantial contributions to conception and design and has been involved in drafting the manuscript. K.Z. and Y.S. have

FIGURE 1  A unilateral purpuric rash in the left inguinal region

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revised it critically for important intellectual content. K.Z., Y.S. and Ç.O. have given final approval of the version to be published. All authors have agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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REFERENCES
1. Bouaziz JD, Duong T, Jachiet M, et al. Vascular skin symptoms in COVID-19: a french observational study. J Eur Acad Dermatol Venereol. 2020 Apr 27. https://doi.org/10.1111/jdv.16544. [Epub ahead of print].
2. Li MY, Li L, Zhang Y, Wang XS. Expression of the SARS-CoV-2 cell receptor gene ACE2 in a wide variety of human tissues. Infect Dis Poverty. 2020;9(1):45.
3. Morey-Olivé M, Espiau M, Mercadal-Hally M, Lera-Carballo E, García-Patos V. Cutaneous manifestations in the current pandemic of coronavirus infection disease (COVID 2019). An Pediatr (Engl Ed). 2020. https://doi.org/10.1016/j.anpede.2020.04.002. [Epub ahead of print].
4. Guan WJ, Ni ZY, Hu Y, et al. China medical treatment expert group for Covid-19. Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med. 2020;382(18):1708-1720.
5. Hedou M, Carsuzzaa F, Chary E, Hainaut E, Cazenave-Roblot F, Masson Regnault M. Comment on "cutaneous manifestations in COVID-19: a first perspective" by Recalcati S. J Eur Acad Dermatol Venereol. 2020. https://doi.org/10.1111/jdv.16519. [Epub ahead of print].
6. Suchonwanit P, Leerunyakul K, Kositkuljom C. Cutaneous manifestations in COVID-19: lessons learned from current evidence. J Am Acad Dermatol. 2020;83(1):e57–e60.