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Hypercoagulability in an immunosuppressed patient with bullous pemphigoid and presumed COVID-19 infection

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Bullous pemphigoid has been associated with a 15-fold increase in thromboembolism, which has also emerged as a major cause of mortality in patients hospitalized with COVID-19. We present a case of a previously healthy 56-year-old man with widespread bullous pemphigoid (status post two 1000mg doses of IV rituximab, and on 60mg of prednisone daily, 500mg of mycophenolate BID, topical clobetasol, oral niacinamide, and 1000mg of doxycycline BID) who presented to the emergency room with severe shortness of breath, tachycardia, and hypotension. He was found to have multiple bilateral pulmonary embolisms, deep vein thrombosis, and multi-lobar pneumonia requiring six days of ICU admission. Of note, he reported a possible history of COVID-19 three months prior (wife tested positive, patient was not tested but had a fever). His intensive care team highly suspected concurrent COVID-19 infection although PCR testing was negative. His mycophenolate was discontinued and he was treated with antibiotics, anticoagulants, stress dose glucocorticoids, and respiratory support. His respiratory status gradually improved and he was discharged home on oxygen, apixaban, and a decreased dose of prednisone (20mg daily). His bullous pemphigoid subsequently worsened. Mycophenolate was restarted at 1000mg BID and prednisone was increased to 40mg daily with complete clearing of his skin. Prior to the COVID-19 pandemic, dermatology guidelines did not include prophylactic anticoagulation in patients with acute bullous pemphigoid. In light of this case, prophylactic anticoagulation in patients with severe bullous pemphigoid could potentially be lifesaving during the COVID-19 pandemic.

References:

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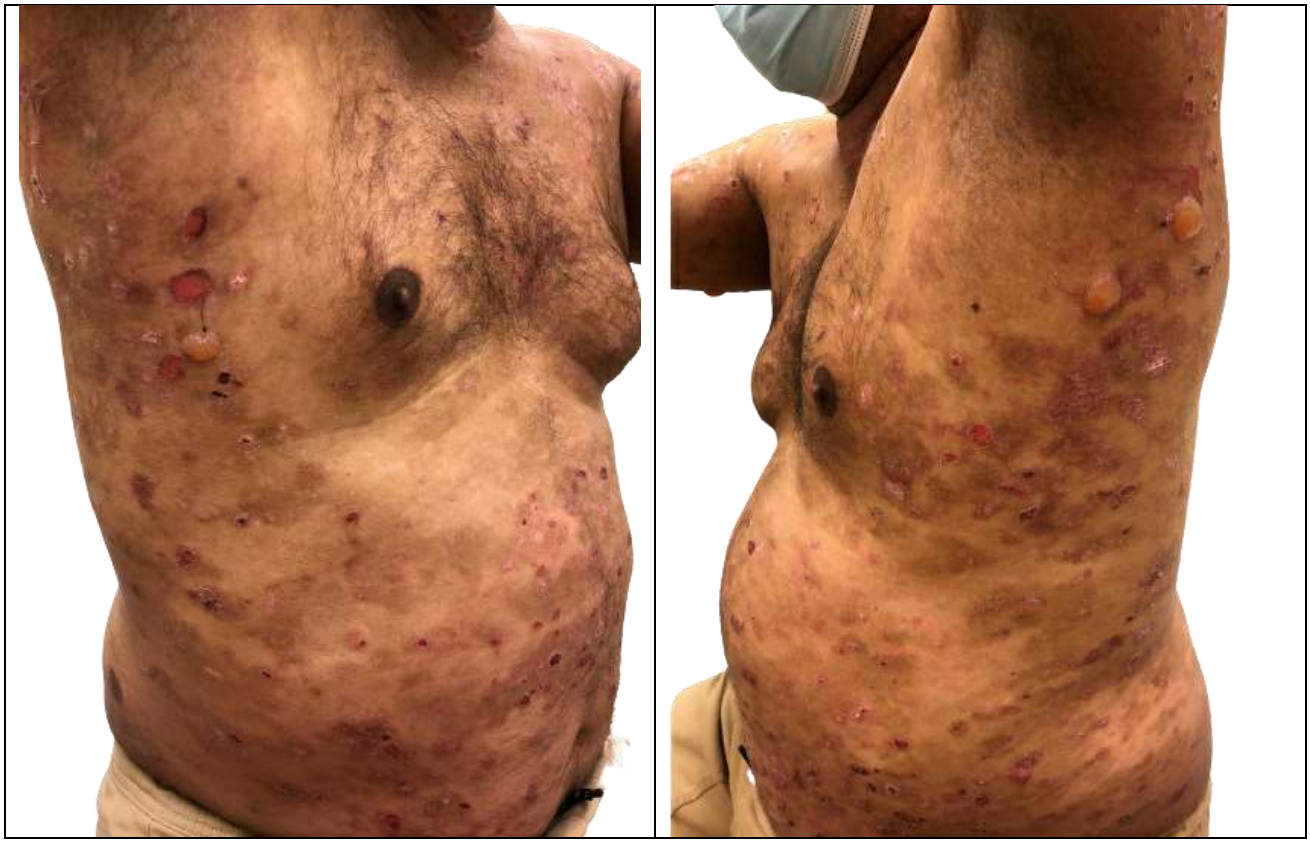

Figure 1*: A 56-year-old man was treated with rituximab, mycophenolate, and prednisone for widespread bullous pemphigoid. He subsequently developed bilateral pulmonary embolisms, deep vein thrombosis, and multi-lobar pneumonia attributed to COVID-19.*