Exacerbation of Lupus Erythematosus Panniculitis After Administration of COVID-19 mRNA Vaccine: a case report

Y. El Kaderi, C. Arnal, U. Sass, L. van de Borne, N. Boulakhrif, B. Richert
Department of Dermatology, Saint-Pierre University Hospital, Brugmann University Hospital
ULB - Brussels, Belgium

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Introduction

Lupus erythematosus panniculitis (PEL) is a rare variant of cutaneous lupus erythematosus, often diagnosed very late. Although the exact etiology of LEP is unknown, triggers such as trauma are now recognized. In this case report, we present a case of exacerbation of LEP after the administration of COVID-19 vaccine [1, 2].

Observation

A 32-year-old woman consulted for painful plaques occured 1 month after the 2nd injection of the vaccine COVID-19, at the injection sites. Other plaques then gradually appeared on the shoulder and back. Her medical history was unremarkable, especially no daily medication. Clinical examination revealed indurated plaques, some ulcerated, with subcutaneous nodules on the back and right shoulder (fig 1, 2, 3, 4). Laboratory findings included a lupus-like serology with anti-nucleosome and anti-CCP antibodies, a positive rheumatoid factor and activation of complement pathways. Histopathological examination revealed an inflammatory infiltrate rich in plasma cells and lymphocytes, rimming, hyalinosis and necrotic adipocytes (fig 5, 6, 7, 8, 9, 10). A diagnosis of PEL was made and treatment with dermocortoids and hydroxychloroquine 400mg/day was instituted, which brought the pathology under control but left sequellar lipoatrophic lesions. The patient is currently being followed up to monitor evolution towards systemic lupus (LES).

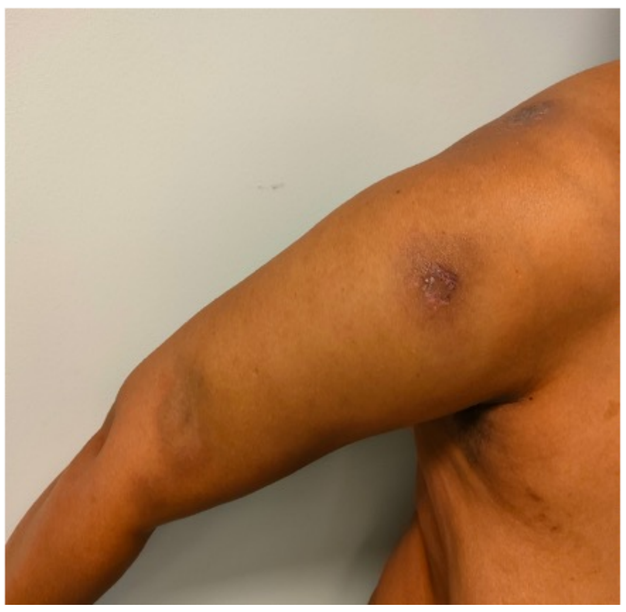

Figure 1

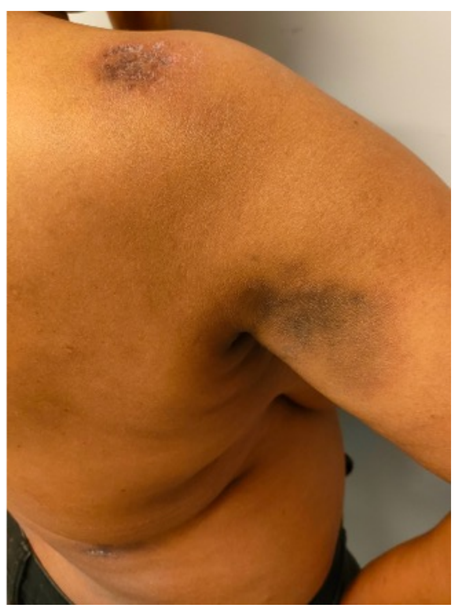

Figure 2

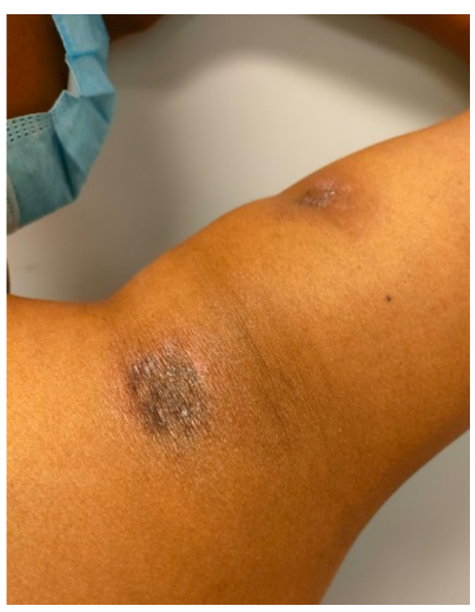

Figure 3

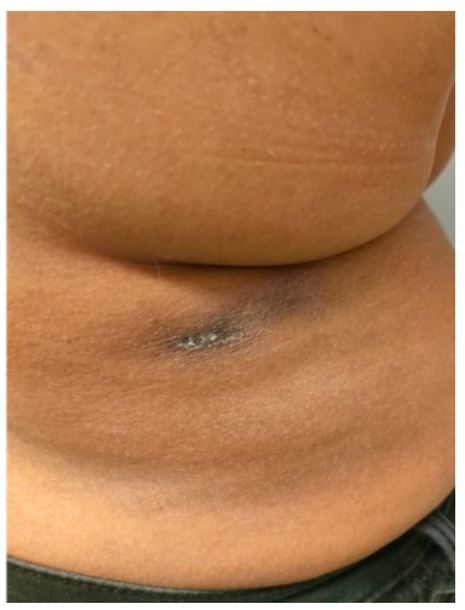

Figure 4

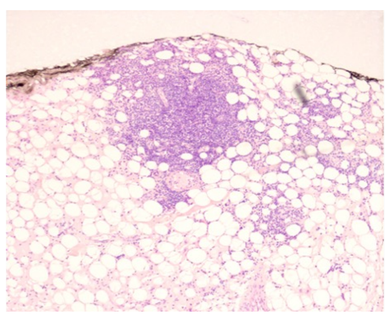

Figure 5

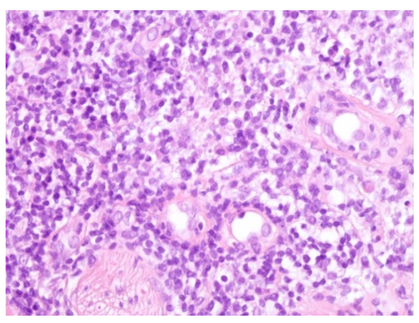

Figure 6

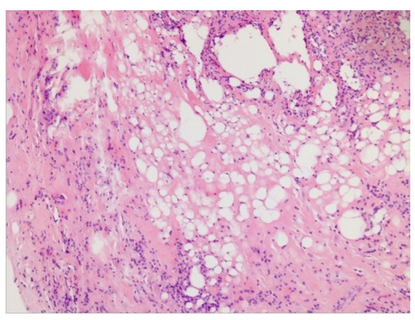

Figure 7

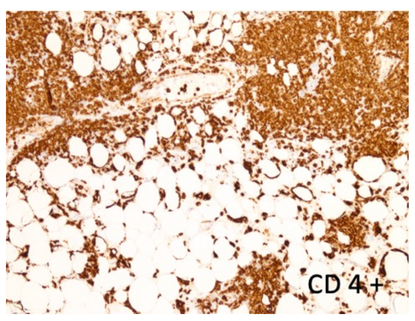

Figure 8

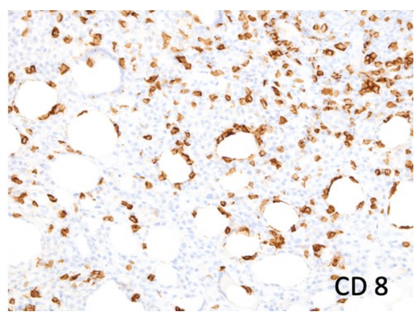

Figure 9

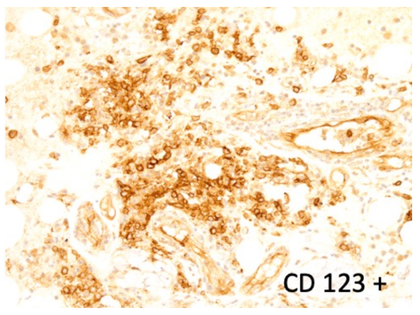

Figure 10

Discussion

PEL is a rare manifestation of lupus disease, sometimes associated with LES. Diagnosis is delayed and can be revealed by a trigger such as trauma or medication. Only one case in the literature reports vaccination as a trigger, as in our patient's case. Above all, it is important to exclude its association with a panniculitis-like T-cell lymphoma, using anatomopathology because the two pathologies can co-exist. Hydroxycloroquine is proposed as first-line treatment, but most patients required more than 2 systemic therapies [1, 2, 3, 4].

Conclusion

LEP is a rare pathology that occurs in young women aged 30. It is important to recognize it to avoid the risk of scarring and to exclude a panniculitis-like T-cell lymphoma which may be associated with it.

References:

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Email : yousra.el.kaderi@ulb.be