

THE MYSTERY OF BLACK PETE MAKE-UP: A SARCOID-LIKE FOREIGN-BODY REACTION

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The cause of sarcoidosis remains unknown but is likely to depend on both genetic and environmental factors (1, 2). Here, we describe the flare of systemic sarcoidosis in a patient associated with an unusual trigger of the disease.

A 34-year-old male was diagnosed with sarcoidosis in October 2016. At presentation he had a classic Lofgren's syndrome. At that time there also were signs of activity (increase of soluble interleukin 2 receptor (sIL2R)). Within a couple of months his clinical condition and clinical features of disease activity improved. In January 2018 he came back and recalled a flare of skin lesions in his face (figure 1a). Fascinatingly, he had a rather extraordinary explanation why this relapse occurred. At the end of November he volunteered at a traditional Dutch feast of Sinterklaas which celebrates the name day of Saint Nicholas on December, 6th. Sinterklaas is assisted by many mischievous helpers with black faces and colorful Moorish dresses. These companions are called Zwarte Piet ("Black Pete"). The patient was one of the Black Pete's. He used make-up (figure 1b). Both make-ups contain talc, but the blue make-up also consisted of magnesium aluminium silicate.

Just one week later he developed skin lesions in his face (figure 1a) and some weeks later also on his legs. Further investigation showed again an increase of his sIL2R and enlarged mediastinal lymph nodes.

Foreign body granulomas in the skin have been described frequently and may have various causes. Talc or talcum (hydrous magnesium silicate) is a clay mineral composed of hydrated magnesium silicate. Beside an industrial mineral, talc is an ingredient in various cosmetic and personal hygiene products. Talc



Fig. 1a. Flare-up of sarcoidosis: erythematous plaques most prominent in the left temporal region

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Fig. 1b. Face of the same patient was colored with make-up one week before the skin lesions appeared (figure 1a)

may cause some adverse effects such as local inflammation, infection, and allergic reactions on the skin and even systemic adverse effects such as sarcoid like reactions. Most commonly, erythematous nodules are seen. Tattoo pigments may migrate to regional lymph nodes and may cause a sarcoid like granulomatous reaction (3).

Among others talc is believed to trigger an exaggerated immune response, with macrophages mediating antigen processing and presentation, leading to an influx of T cells, a polarized T helper 1 (Th1) cytokine response, and ultimately, to granuloma formation (4). Several susceptibility genes have been identified in sarcoidosis, with the strongest associa-

tions to date in the major histocompatibility (MHC) class II gene alleles, which coordinate antigen presentation. These findings support the role of a dys-regulated response to antigens in development of sarcoidosis (5).

A flare up of systemic sarcoidosis in a 34-year-old male with a history of sarcoidosis first presenting with Lofgren's syndrome, who demonstrated spontaneously remission half a year after the first submission (April 2017), was presented. December 2017 he developed skin lesions in his face, just after he used make-up. This make-up contains talc. This undeniably exceptional case shows that the trigger of a sarcoid-like reaction might be make-up containing talc. It emphasizes that talc exposures should be considered in case of skin lesions as well as other manifestations of sarcoidosis or sarcoid-like reactions.

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