

Molluscum contagiosum eruption during therapy with methotrexate and abatacept: A clinical and dermoscopic case study

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Abstract

The use of multiple drugs acting as modulators of the immune system are common among patients with severe autoimmune diseases. In these clinical scenarios, great attention should be placed on diagnosing infective cutaneous disorders that can underlie iatrogenic immunosuppression. Here within, we report a rare case of molluscum contagiosum eruption on the face and the scalp during an immunomodulating treatment for rheumatoid arthritis, with clinical and dermoscopic characterization.

Introduction

Molluscum contagiosum (MC) is a benign cutaneous infection due to a virus of the Poxviridae family. MC is transmitted by direct skin contact, and it usually occurs in children or, due to sexual transmission, in adults. In patients without immune system impairments, it tends to resolve spontaneously in a time ranging from months to years.¹

Persistent, recurrent, difficult-to-treat and clinically atypical MC infections are commonly found among immunocompromised patients. Although it is uncommon, the burden of this disease is probably underestimated.² Some reported diseases associated with MC in adults are acquired immune deficiency syndrome, solid organ transplants, systemic lupus erythematosus, sarcoidosis, neoplasia, immunosuppressive and biologic therapy.³

Case report

A 70-year-old woman with a severe form of rheumatoid arthritis was admitted to our outpatient clinic due to a two-month

history of facial eruption. Three months before, she had started therapy with methotrexate (12.5 mg weekly) in addition to Abatacept (750 mg monthly) due to unresponsiveness. She also has a past medical history of cerebral meningioma cured with surgery. The patient was also under medication with bisoprolol fumarate and pilocarpine hydrochloride, respectively, for hypertension and Sjogren syndrome for more than four years. At the time of our evaluation, the patient was experiencing partial control of the autoimmune diseases.

Clinical examination revealed some pearly pink umbilicate papules in the face, especially in the nasal bridge and on the left eyebrow area. Most of them located in the central part of the face was excoriated (Figure 1). Some hemispheric flesh-colour lesions were present also in the vertex area of the scalp (Figure 2).

No other lesions were found on the skin and visible mucosa. The dermoscopic examination of the scalp revealed a 5 mm papule with central orifice and crown vessels (Figure 3). Complete blood count, including white cell and differential, was within the standard limits.

Histopathological examination of one lesion showed subcorneal cyst and intracytoplasmic inclusion bodies (the *molluscum bodies*) connected with the epidermal surface. Together with clinical and dermoscopic aspects, these features were consistent with the diagnosis of MC infection. The patient was treated with local cauterization. The immunosuppressive treatment had not been interrupted or replaced, and recurrences were observed at a six-month follow-up visit.

Discussion and conclusions

The diagnosis of MC is mainly clinical, although dermoscopy can help highlight the presence of vessels and lesional orifices,⁴ especially among immunocompromised patients, in which skin lesions may display atypical features.

Nevertheless, in case of suspected immune impairments, the histopathological examination is mandatory to exclude other opportunistic cutaneous infections that can mimic MC, such as penicilliosis and cryptococcosis, coccidioidomycosis, aspergillosis and sporotrichosis.⁵ There are few cases reported of MC during treatments for rheumatoid arthritis.⁶⁻⁸ To the best of our knowledge, this is the first case of MC eruption during coadministration of methotrexate and Abatacept for rheumatoid arthritis with scalp involvement.

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Since immunosuppressive drugs use combined with immunomodulatory therapy increases, we maintain the importance of considering MC as a clinical signal of depressed CD4+ T-cell count, especially when clinically extensive. In these iatrogenic immunosuppression cases, a change

in the therapeutic regimen should be considered to avoid other more severe opportunistic infections and treat the MC.⁷ Due to the extreme disability from rheumatoid arthritis and the mild nature of the MC infection, the replacement of therapy was not performed in our patient.



Figure 1. Clinical image of some pink umbilicate papules located in the nasal bridge and on the left eyebrow area. On the central part of the face, some excoriated lesions.



Figure 2. Clinical image of a molluscum contagiosum in the vertex area of the scalp.



Figure 3. Dermoscopic image (20X) of one 5 mm papule of the scalp with the typical central orifice surrounded by crown vessels.

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