

Sprue-like disease possibly related to a single dose of methotrexate

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Sir,

Methotrexate is an antimetabolite commonly used in dermatology for inflammatory and autoimmune diseases, including psoriasis. Malabsorption secondary to treatment with methotrexate after its use in high doses and/or long-term has been described in the literature. However, only several cases of a sprue-like disease secondary to a low dose of methotrexate have been described. Herein, we report an exceptional case of a sprue-like disease after a single dose of methotrexate.

A 43-year-old female was admitted to our department with psoriatic erythroderma (Figs. 1a and 1b). Treatment with MTX was administered at a dose of 12.5 mg/week as well as folic acid supplements. Three days later, the patient developed bilateral leg edema, associated with biological malabsorption syndrome (hypoalbuminemia at 19 g/L, hypocholesterolemia at 0.98 g/L, prothrombin time at 45%, blood glucose at the lower limit of 0.7 g/L, and normocytic normochromic anemia at 9.4 g/dL). A duodenal biopsy performed three weeks later revealed no villous atrophy (Fig. 2). The discontinuation of methotrexate led to the disappearance of the leg edema and the progressive correction of biological parameters.

Three cases of non-coeliac sprue secondary to the use of methotrexate at low doses have been reported in the literature [1-3], either after relatively prolonged use (ten months) or after a single injection. A duodenal biopsy performed early or during treatment with methotrexate revealed villous atrophy. In our case, the absence of villous atrophy in the biopsy might be explained by the



Figure 1: (a) Psoriatic erythroderma and (b) bilateral leg edema.

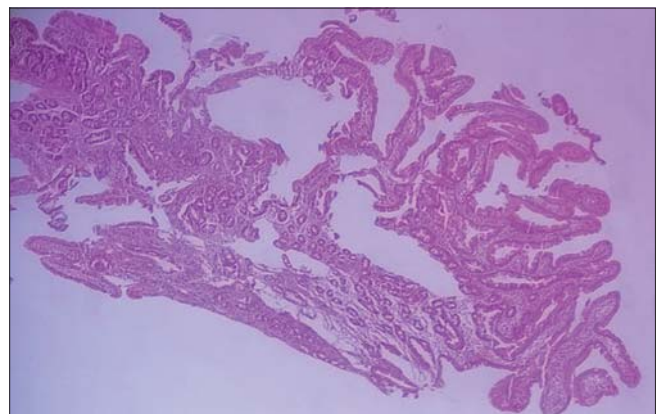


Figure 2: Duodenal biopsy.

biopsy being performed three weeks after the injection. In fact, according to experimental studies, villous atrophy secondary to methotrexate is observed 72 hours after a methotrexate injection and regresses spontaneously in three to four weeks after the completion of treatment [3].

How to cite this article: El Gaitibi FA, Khallaayoune M, Palamino H, Meziane M, Benzekri L, Ismaili N, Hassam B, Senouci K. Sprue-like disease possibly related to a single dose of methotrexate. *Our Dermatol Online*. 2022;13(4):465-466.

Submission: 31.01.2021; **Acceptance:** 16.04.2021

DOI: 10.7241/ourd.20224.30

The appearance of a sprue-like disease after a single dose of methotrexate is exceptional but possible, even in combination with folic acid supplements. The interest of a duodenal biopsy in the first days of clinical suspicion is to reduce morbidity.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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Source of Support: Nil, **Conflict of Interest:** None declared.