Luetic meningoencephalitis masquerading as postclimacteric endogenous depression - a diagnostic challenge

Abstract: The secondary stage of syphilis is characterized by a large variety of symptoms and may mimic many skin diseases. The generalized exanthem of the secondary stage is often confused with a drug eruption. It is due to these peculiarities that syphilis, and in particular its secondary stage, is known as the "clinical chameleon" or "great imitator". Nonspecific neurological symptoms like headache, lightheadedness, and slight mental depression appear prior to the skin manifestations characteristic of the second stage of the disease. Subsequently, when the patient begins to develop the characteristic disseminated maculopapular exanthem with palmoplantar involvement, the clinician may have to re-evaluate to exclude an early form of syphilitic meningoencephalitis. We report here the case of a female patient with suspected endogenous depression as part of the post-climacterium syndrome. Shortly after the introduction of antidepressant therapy the patient developed a generalized maculopapular exanthem. She was seen in the Dermatology clinic due to suspicion for a drug eruption. A diagnosis of secondary syphilis with palmoplantar involvement, associated with an early form of syphilitic meningoencephalitis, was established. After systemic antibiotic treatment, complete remission was achieved.

Introduction
The exanthems of late secondary syphilis occur within two years after the initial exanthem in about 25% of patients. They may assume the form of a macular or papular eruption, but are usually characterized by a smaller number of larger lesions, which may be confluent, and exhibiting more paller than smaller lesions [1,2].

The late secondary lesions tend to spare the areas of the previous exanthem and may involve the periphery of the prior lesions [2]. They may have an annular arrangement or be grouped in clusters of papules. Only rarely are nodules seen.

As lesions recur, their intensity tends to decrease and the symptom-free intervals tend to increase. This may reflect improvement by the immune system in targeting the infection [1,2]. Disease progression depends on the immunologic status of the individual [2]. If the patient has not been treated, the disease may progress to the tertiary stage, with the typical symptoms that characterize it [2, 3].

The establishment of a diagnosis of secondary syphilis may be a challenge even for dermatologists [2]. Due to this fact, interdisciplinary cooperation is needed in many cases, especially if the disease does not respond to the usual treatment [2].

History of Presentation
A 51-year old post-menopausal female patient was referred for a 9 week history of headaches, apathy, weakness, and intermittent diaphoresis. She was initially seen by psychiatry, internal medicine, and gynecology services. The symptoms were interpreted as an endogenous depression, being part of a post-climacterium syndrome.

Systemic therapy with phenylethylamin derivate (Trevilor) was prescribed. Five days after the initiation of the therapy, the patient developed an asymptomatic generalized maculopapular exanthem. The patient was then referred to an allergist and treated with doxepin. Systemic anti-histamines as well as topical hydrocortisone 1% cream were also prescribed. Due to the lack of improvement after 7 days, the patient was referred to the dermatology clinic for evaluation.

Clinical findings:
The patient displayed a generalized monomorphic maculopapular exanthem of the trunk with lichenoid features. Single lesions were elevated, sharply demarcated, flat-topped, with a shiny surface, and a mean size of 4-5 mm, without any tendency for confluence. The lesions also exhibited a discrete epidermal collarette at the periphery. There were no inflammatory features, nor any erythematous or violaceous color noted. The intervening skin was normal. The palms and soles displayed multiple maculopapular lesions with a component of scale.

Laboratory findings:
CRP - 41, (normal after treatment), BSG 84/96 (80/90 after treatment), GGT 3, 61 (after treatment 1,73); AP 2,77(l after treatment 1,83); ALT 0, 77, (normal after treatment), HB 7,6 (normal after treatment), Lues serology: serum-TPHA 1:40 960, VDRL 1:64 , T.p.-IgM-AK/ELISA/ 280 U/ml / norm up to 20/, T.p.-IgG-AK/ELISA/ 170 U/ml / norm up to 20/.

Conclusions:
We report the case of a patient with an atypical course of the secondary stage of syphilis. In secondary syphilis, CNS manifestations are possible, and are often nonspecific, mimicking a wide range of other diseases [4,5,6,7]. Therefore, the careful clinical evaluation of the cutaneous lesions and their location, as well as cerebrospinal fluid analysis are necessary in the clinical setting.

In this case, the neurological presentation of secondary syphilis was initially interpreted as post-climacteric depression and not recognized as an early luetic meningoencephalitis.

Figs. 1a-1b: Generalized monomorphic maculopapular exanthem of the trunk with lichenoid character.
Figs 2a-2c: Palmoplantar localized maculopapular lesions with a scaly component.

REFERENCES: