

# CHRONIC MIGRAINE AS UNUSUAL PRESENTATION OF SYPHILIS

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## Introduction

Although headache is a common symptom of syphilis, especially in the presence of syphilitic meningitis, its appearance as a single symptom is extremely rare. Here, we describe a case with refractory migraine as isolated clinical manifestation of syphilis.

## Case presentation

A 23-year-old woman presented with recurrent headache of six months duration. Head pain was pulsating, moderate-severe, located primarily at the left frontal, temporal and parietal regions, associated with nausea, vomiting, phonophobia and photophobia. The headache attacks did not respond to analgesic drugs, and gradually became near daily and of longer duration. Neurological examination was normal. A gadolinium-enhanced brain MRI showed neither nor pathological findings nor leptomeningeal enhancement. These findings allow us to make the diagnosis of chronic migraine without aura.

Since the patient had headache unresponsive to preventive and acute treatments, we performed a further diagnostic test. Indeed, she was found positive for syphilis infection and negative for HIV infection. The laboratory testing revealed a positivity for antibodies against spirochete *treponema pallidum*. Serum rapid plasma reagin (RPR) titers reached 1:16. The *treponema pallidum* hemagglutination assay (TPHA) result was positive (1:2560). Due to the laboratory results, a subsequent lumbar puncture took place. CSF color, protein, glucose and opening pressure were normal and CSF Venereal Disease Research Laboratory (VDRL) test was negative. After this, the patient was treated with intravenous ceftriaxone, to which she responded with complete regression of migraine. One month later, serum RPR titers were 1:8.

## Discussion

The brain imaging showed no evidence of meningeal involvement which is the usual cause of headache in patients with neurosyphilis. However, in this case there is a link between migraine and syphilis considering the patient response to the medication and the regression of chronic migraine. Importantly, the occurrence of migraine as a presenting symptom of syphilis infection has not been previously reported in the literature.

## Conclusions

Consistent with the increase in the incidence of syphilis worldwide in the last years, the present case suggests that syphilis infection without meningeal involvement should be taken into account in the differential diagnosis of intractable chronic migraine.

