

Migraine aura without headache – a challenge case of clitoris paresthesia

*Aura de migraña sin dolor de cabeza:
un caso de desafío de parestesias del clítoris*

Ana Poças¹, João Ramalho²

¹Centro Hospitalar de Leiria (Portugal) ²UCSP Litoral (Portugal)

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The term “aura” denotes recurrent attacks of neurologic symptoms that can include visual, sensory, speech, motor or other central nervous symptoms. The neurologic symptoms generally last some minutes and are fully reversible. The aura is generally followed by a headache but in some migraine attacks there is aura without headache, previously called “silent migraine” or “acephalgic migraine” and can become more common as people get older.¹

Our clinical report is about a 25-year-old woman. She has a boyfriend for 5 year and she is sexually active. No medical history of relevance except migraine and asthma, having only as chronic medication the contraceptive pill and analgesics as needed for headache (ibuprofen 600mg). The frequency of migraines ranged from 2 to 3 times a month. She identifies the fact of sleeping less as a trigger and describe her migraines as a pulsating, severe pain, associated with phonophobia and photophobia. She denies a history of falls with trauma to the brain or any type of surgical intervention.

She presented worried, at a medical appointment, with complaints of clitoral paresthesia episodes with two weeks of evolution. She explains that events occur one to three times a day, on non-consequential days, and have a duration of 10 to 45 minutes. She denies a traumatic event and does not associate the onset of symptoms with any particular situation. She mentions that the first time it occurred to her, was on a morning when she was driving after work. Maintains libido and the ability to achieve orgasm. When asked, she confirmed that in two of these episodes she had associated migraine after 5 minutes of that clitoris aura and the headache was similar to her previous migrainous headaches.

She denied other symptoms/signs. Neurological examination and control analysis were normal. Cranial computed tomography and electroencephalogram were also normal.

About five years ago, this patient had already had two episodes of migraine with aura, but on those occasions, it was a visual aura where she saw the images as if they were hexagons. Except for these cases, her migraines never had an aura before.

The episodes of clitoral paresthesia occurred with and without associated headache in this patient, the last ones can

be classified as migraine aura without headache in which aura is neither accompanied nor followed by headache of any sort. The lack of knowledge of this disease led the patient to become worried and think that she could have a sexual problem, which led her to see a doctor. She was medicated with sumatriptan 50mg and paracetamol 100mg prn for the migraine, one of the treatment options of NICE guidelines. These aura symptoms completely disappeared and the frequency of migraines was reduced to one or two times a month so no prophylactic treatment was offered.

Clinical and preclinical studies suggest that migraine aura is caused by cortical spreading depression (CSD), a slowly propagating wave of depolarization/excitation followed by hyperpolarization/inhibition in cortical neurons and glia. While specific processes that initiate CSD in humans are not known, mechanisms that invoke inflammatory molecules as a result of emotional or physiological stress, such as lack of sleep, may play a role.² Sensory aura is the second most frequent kind of aura after the visual aura (31% versus 99%).³ It may appear in form of paresthesia, hypoesthesia, or both and the sensory symptoms classically begin in one hand, spread to the arm and reach the perioral region. In the absence of headache fulfilling criteria for migraine without aura, the precise diagnosis of aura and its distinction from its imitators that may signal serious disease becomes more difficult and requires additional investigation. When aura occurs for the first time after the age of 40, when symptoms are exclusively negative or when aura is prolonged / very short, other causes, for example transient ischemic events, should be excluded.

¹ Migraine aura without headache should be diagnosed only when transient ischemic attack and seizure disorders have been ruled out.⁴

We only found in the literature two patients (a male and a female patient) who experienced prominent sensory symptoms in the genital region during their migraine auras. The male had paresthesia clearly localized in his testicles, more evident on the left and the female patient presented with headache preceded by right hemianopia, which was consistently followed by intense paresthesia in both the right half of her mouth and the ipsilateral vulva.⁵ We have not found in the available

literature any description of sensory aura involving the clitoris. Genital disturbances as migraine aura have not been described in many patients, but other neurological disorders are known to produce this kind of symptoms. Seizures have genital symptoms well characterized: orgasms may trigger reflex epileptic seizures and genital symptoms may represent true epileptic manifestations⁶, sexual auras presenting as erotic pleasant feelings or thoughts with or without sexual arousal and orgasm are associated with temporal lobe epilepsy.⁷

The reasons for a low incidence of sensory symptoms in the genital region during migraine aura are partially unknown. Some authors suggest that the cortical neurons representing the genital area can have a higher threshold to be activated during the CSD.⁸ Feelings of embarrassment can also explain the fact that patients don't always confess this sort of symptoms, so they may have been under-recognized.

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