CC 110. Fighter pilot with incapacitating headache attacks: Dramatic response to galcanezumab on intensity/frequency of migraine attacks, but without affecting prodromal manifestations

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Objective

In a migraine attack, we can highlight two phases: (1) the prodromal phase that precedes the pain by hours, and (2) the phase of the classic manifestations of migraine with aura and headache, associated with pathognomonic nausea/vomiting, photo/phonophobia. We wish to present a case of a patient with incapacitating migraine attacks (two to three times a week), which are always preceded by marked prodromal manifestations. With treatment using monoclonal antibody anti-CGRP (galcanezumab), there was a drastic improvement in migraine pain crises without affecting prodromal symptoms of hypertonia and cervical-nuchal pain. Thus, there is an apparent dichotomy between the action of galcanezumab on the prodromal phase and the classic painful phase of migraine.

Case description

Caucasian 38-year-old man, airplane pilot, with refractory migraine, with incapacitating migraine attacks (two to three times a week, 5 to 7 sumatriptan tablets a week), reported that his migraines crises started at age 14. One and 6 hours prior to the crises, the patient reported prodromal manifestations, such as pain and hypertonia in the right nuchal region, soreness in the outer corner of the right eye, and a vague feeling of discomfort. On examination: pain in the supraorbital and greater occipital nerves on the right. Because of his profession, he did not tolerate divalproex, amitriptyline, propranolol, and topiramate. Divalproate could not be tolerated due to difficulty in delicate movements and he felt drowsy. Topiramate was not tolerated due to drowsiness and cognitive difficulty. The therapeutic proposal was nerve block and anti-CGRP monoclonal antibody. The patient received as preventive treatment galcanezumab (120 mg/month). Sixty days after the first dose of galcanezumab, he improved substantially, reporting only two less intense crises associated with alcohol consumption and using three sumatriptan tablets in the period. Furthermore, 150 days later, he used only three tablets of sumatriptan in a 90-day interval. Stressful situations no longer trigger seizures. On the third return to the outpatient clinic after 270 days, he mentioned almost no headache crises. He reports that triggering situations such as stress or intense light sometimes cause pain and stiffness in the cervical muscles and a feeling of discomfort, but the crisis does not develop beyond that.

Conclusion

We describe the action of an anti-CGRP antibody in a patient who works as a fighter pilot, a profession that demands great cognitive activity and motor skills. This class of drugs has a preventive action on migraine without altering cognitive functions, including attention and motor performance. The treatment showed a dichotomized action on the phases of migraine - acting essentially on headache attacks without affecting prodromal manifestations.