

## **CC103. Case report: a paroxysmal hemicrania responsive to verapamil.**

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### **Objective**

Paroxysmal hemicrania is a rare type of trigeminal autonomic headache, whose diagnostic criteria include responsiveness to indomethacin. In this report, we present a case of a patient with a partial response to the first-line drug therapy and good responsiveness to verapamil.

### **Case Description**

A 56-year-old woman presented with a 1-year history of throbbing pain in the left hemiface, and retro-orbital and temporal ipsilateral pain, which lasted for about 30 minutes with a frequency of 5-6 episodes per day, and a maximum remission period of 3 months. The headache attacks were associated with nasal congestion and allodynia and had worsened recently. Her past medical history was positive for major depressive disorder and hypertension. At the time she presented, she was taking carbamazepine 900 mg per day, which resulted in partial relief of the pain. Clinical examination revealed pain on palpation of the trigeminal nerve branches on the left side, bilateral temporomandibular pain, and pain on palpation of the right greater occipital nerve. Magnetic resonance angiography of the head did not show any abnormality. To manage the headache attacks, treatment was started with indomethacin 300 mg in the occurrence of the pain episodes, along with chlorpromazine 6 mg per day and carbamazepine 200 mg per day, which decreased the intensity of the pain but did not influence the frequency of the attacks. Therefore, verapamil 80 mg per day was started, continuing the use of previously prescribed medications. Given the normal ECG result, the dose of verapamil was increased to 240 mg per day, and carbamazepine was discontinued. The patient progressed with only two mild episodes of pain per month.

### **Conclusion**

Responsiveness to indomethacin is an important diagnostic criterion for paroxysmal hemicrania, yet some patients have an incomplete response to this therapy. The use of alternative therapies is limited by the lack of research and evidence supporting treatment with other drugs. Nevertheless, it is worth noting that indomethacin should not be neglected as the first therapeutic choice, and non-responsiveness to the first-line drug should increase the possibility of alternative diagnoses. Verapamil was effective in this case, corroborating with case reports that obtained this same result. However, further

studies are needed to evaluate alternative treatments to indomethacin, especially regarding verapamil and other calcium channel blockers.