

# Migrainous periorbital ecchymosis

## Equimose periorbitária na enxaqueca

Sara DUARTE<sup>1</sup>, Carlos ANDRADE<sup>1</sup>

A 27-year-old woman, with migraine with aura since age 9, developed two episodes of alternating periorbital ecchymosis, with one-month interval, which happened a few hours after the headache onset (Figure 1). The pain lasted more than usual (48 to 72 hours), and the ecchymosis persisted from three to four days. After over two years of follow-up, there was no recurrence of such episodes.

The spontaneous periorbital hematoma/ecchymosis in migraine is a rare entity assumed to reflect complex neurovascular changes<sup>1,2</sup>, specifically vasodilation of intracranial and extracerebral blood vessels through the release of vasoactive substances<sup>3</sup>.





Figure 1. Periorbital ecchymosis after a migraine attack.

### References

1. Shevel E. The extracranial vascular theory of migraine – a great story confirmed by the facts. *Headache*. 2011 May;51(3):409-17. <https://doi.org/10.1111/j.1526-4610.2011.01844.x>
2. Obermann M, Yoon MS, Dommès P, Kuznetsova J, Maschke M, Weimar C, et al. Prevalence of trigeminal autonomic symptoms in migraine: a population-based study. *Cephalalgia*. 2007 Jun;27(6):504-9. <https://doi.org/10.1111/j.1468-2982.2007.01316.x>
3. Kalendovsky Z, Austin JH. Changes in blood clotting systems during migraine attacks. *Headache*. 1977 Jan;16(6):293-312. <https://doi.org/10.1111/j.1526-4610.1976.hed1606293.x>

<sup>1</sup>Centro Hospitalar Universitário do Porto, Hospital de Santo António, Department of Neurology, Porto, Portugal.

Sara DUARTE  <https://orcid.org/0000-0001-6147-841X>; Carlos ANDRADE  <https://orcid.org/0000-0002-9430-101X>

**Correspondence:** Sara Duarte; Email: sararibeiro.neurologia@chporto.min-saude.pt.

**Conflict of interest:** There is no conflict of interest to declare.

**Authors' contributions:** Duarte S: manuscript preparation; writing the first draft; critical revision of the manuscript. Andrade A: Conceived the idea of the manuscript; supervision; critical revision of the manuscript.

Received on March 14, 2020; Received in its final form on April 21, 2020; Accepted on May 4, 2020.