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## Headache and spontaneous glabellar ecchymosis: More than a self-injury behavior?

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A 33-YEAR-OLD MAN PRESENTED to our outpatient clinic for evaluation of severe headaches located at the left eye and forehead and multiple episodes of discoloration of the superior glabella. The pain was described as throbbing lasting for 30–45 min about 2–3 times per month with minimal nausea, photophobia, left eye tearing, redness, and ptosis. The erythema-like lesion developed after a severe headache episode and gradually resolved over the next few days. The patient disclosed habitually rubbing the forehead or face during pain episodes, making an 'artificial' post-traumatic skin ecchymosis unlikely.

Evaluation consisted of high-resolution brain magnetic resonance imaging, including orbital scans, angiography and paranasal computed tomography, which were unremarkable. Routine blood tests were normal. The patient's initial physical exam and the neurologic exam were also normal. The patient responded well to a brief course of subcutaneous sumatriptan and oxygen for acute attacks.

The site, severity, duration of attacks, and trigemino-autonomic symptoms as well as continuous low-grade pain between attacks of severe pain and dramatic response to subcutaneous sumatriptan appeared to be typical for trigemino-autonomic cephalgias. To our best knowledge, this is the first case reporting an association of glabellar ecchymosis with cluster-type attacks. The pathogenetic cause of this phenomenon may be related to autonomic vascular dysfunction, including the partial trigeminovascular system activation and secondary neurogenic inflammation mediated by substance P leading to dermal diapedesis of erythrocytes. In accordance with this, previous case studies suggest an activation of the trigeminovascular system as candidate mechanism of this rarely seen phenomenonon.<sup>1-4</sup>

It is widely known that cluster headaches not only have a cyclic pattern, but also can involve self-injury behavior to provide distraction from the severe head pain. In light of recent evidences showing that self-injury behavior and behavioral alterations are seen in both cluster headache and various cyclic psychiatric disorders associated with headache (e.g., mixed states bipolar disorder),<sup>2</sup> this case provides interesting evidence that some special headache types can lead to spontaneous formation of ecchymosis, which can help us to differentiate the neurological and psychiatric causes of self-injury behavior. In conclusion, bruising of the forehead associated with cluster headache is an interesting feature not only in the headache population but also in the psychiatric population with headache and should be further evaluated with functional neuroimaging (i.e. 18-Fluoro-deoxyglucose positron emission tomography, functional magnetic resonance imaging) in order to enlighten the interesting pathophysiological link between psychiatric disease, headache and spontaneous formation of ecchymosis.

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[Correction added on 12 November 2014, after first online publication: The journal title cited in reference no. 1 was amended.]

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## Successful treatment of excessive supragastric belching by combination of pregabalin and baclofen

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 $B_{
m and}$  gastroesophageal reflux disease. Only a minority of patients suffer from so-called 'excessive supragastric belching'

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