

# Severe Unilateral Periorbital Pain as a Symptom of Cervicogenic Headache: a Case Report

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## Summary of background data

Severe unilateral periorbital pain is a recognised feature of trigeminal autonomic cephalalgias (1) and other conditions. It can also be a symptom of cervicogenic headache (2). Differential diagnosis may be challenging unless invasive tests are employed (3).

## Objectives

We report a case series of severe unilateral periorbital pain, 'unexplained' and/or unresponsive to conventional pharmacological treatment where subsequent diagnosis of cervicogenic headache, managed accordingly, lead to a lasting remission.

## Methods

Clinical observations from Pain Clinic practice

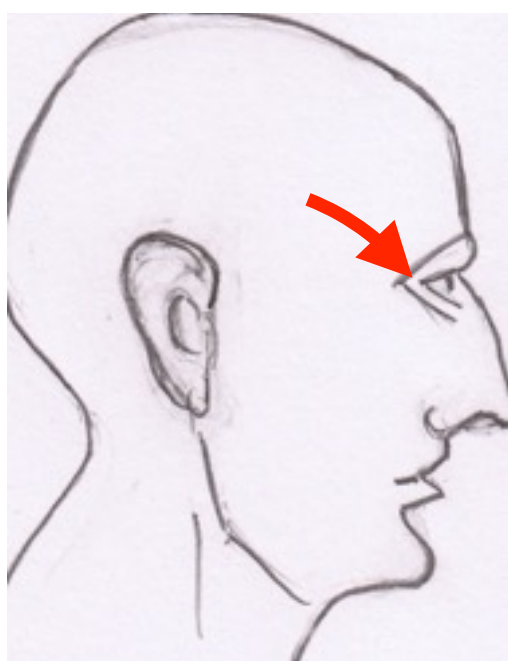


Fig 1. Pain behind the eye

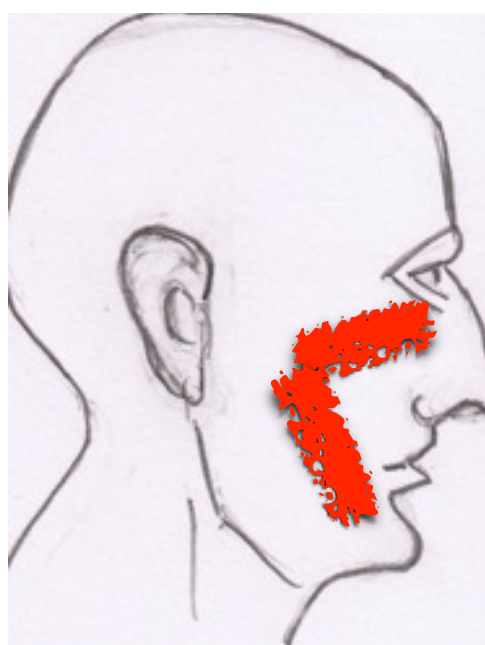


Fig 2. Pain under the eye

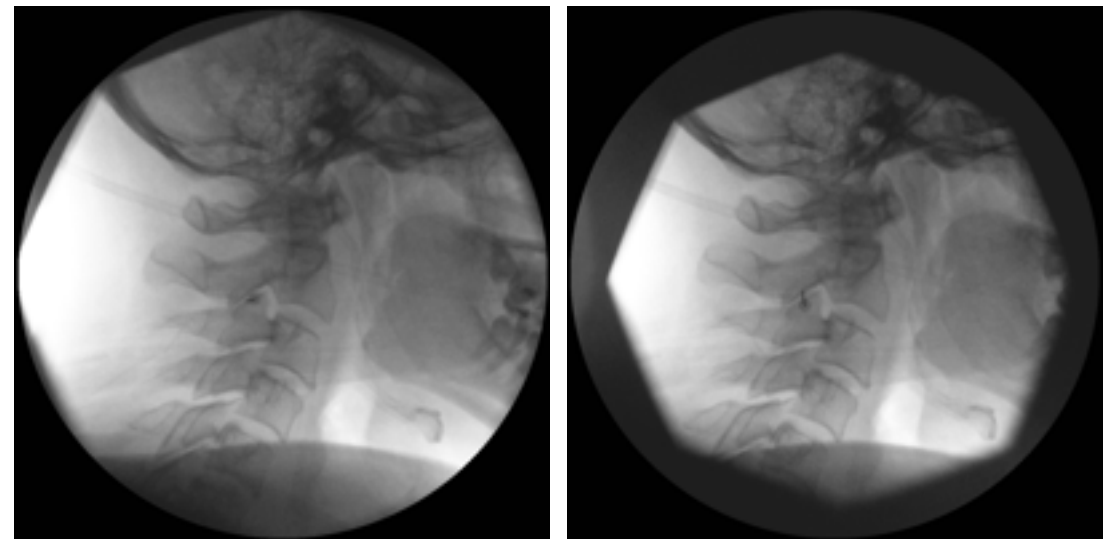


Fig 3. C2-3 medial branch block

**Results:** 6 patients, 40-72 years old, 4 males and 2 females, were referred to our pain clinic with severe unilateral headache and/or facial pain. All patients reported pain around, behind (Fig 1) or under the eye (Fig 2). Before this referral, the spinal cause had either been unsuspected despite ipsilateral paravertebral tenderness or spinal invasive procedures had not been used. Following a positive cervical medial branch block (Fig 3) in 5 cases and occipital nerve block in one, using plain bupivacaine 0.5%, the diagnosis of cervicogenic headache was made. In 3 cases remission was achieved with blocks alone, 3 patients underwent cervical RF neurotomy. Long-term daily exercises for the cervical spine were used in all cases. At the time of abstract submission 4 patients remained in complete and 2 in partial (periorbital pain not present) remission lasting between 6 and 18 months, with full functional recovery.

## References:

- 1) The International Classification of Headache Disorders, 3rd edition (beta version). *Cephalalgia* 2013; 33(9): 629–808
- 2) Fredriksen TA, Hovdal H, Sjaastad O. "Cervicogenic headache": clinical manifestations. *Cephalalgia* 1987; 7: 147-60
- 3) Bogduk N, Govind J. Cervicogenic headache: an assessment of the evidence on clinical diagnosis, invasive tests, and treatment. *Lancet Neurol* 2009; 8: 959–68

## Discussions/conclusion

The diagnosis of cervicogenic headache in hitherto 'unexplained' or intractable periorbital pain allows simple and effective non-pharmacological treatment resulting in sustained remission.