

# Facial pain in MS: When to think of trigeminal autonomic cephalalgia

Sanjay Cheema  and Manjit Matharu

Date received: 30 November 2023; revised: 29 January 2024; accepted: 16 February 2024

Giuliani and colleagues report a patient with multiple sclerosis (MS) who developed short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT). The patient had a demyelinating lesion in the pons close to the trigeminal root entry zone and responded to treatment with lamotrigine.<sup>1</sup>

SUNCT is a rare headache syndrome classed as a trigeminal autonomic cephalalgia (TAC). This group of disorders also includes cluster headache, paroxysmal hemicrania and hemicrania continua, which have shared features of unilateral head pain associated with ipsilateral cranial autonomic symptoms. The TACs are distinguished from each other by their attack length and treatment response, and SUNCT has the shortest attacks, lasting 1–600 seconds.<sup>2</sup>

SUNCT also has clinical, radiological and therapeutic overlap with trigeminal neuralgia (TN). Patients with MS are thought to have a 20-fold increased risk of TN.<sup>3</sup> SUNCT is far rarer than TN, and epidemiological studies have not been able to assess whether its risk is also increased in MS. Both TN and SUNCT cause severe neuralgiform pain in the trigeminal distribution, may be associated with pontine lesions and/or trigeminal neurovascular conflict, and frequently respond to sodium-channel blocking medications. Other than the presence of cranial autonomic symptoms, in comparison to TN, SUNCT is more likely to affect the first division of the trigeminal nerve, less likely to have a refractory period after triggered pain and more likely to be associated with background pain.<sup>4</sup>

Randomised controlled trials for treatment of SUNCT have not been performed, but open label evidence suggests that lamotrigine is the most effective medical treatment and should be considered first line if there are no contraindications.<sup>5</sup> Alternatives are carbamazepine, oxcarbazepine, duloxetine, topiramate, pregabalin and gabapentin. In refractory patients with neurovascular conflict, microvascular decompression

can be considered. Occipital nerve stimulation and deep brain stimulation are promising alternatives for medically intractable patients.

## Declaration of Conflicting Interests

The author(s) declared the following potential conflicts of interest with respect to the research, authorship and/or publication of this article: S.C. has nothing to disclose. M.M. is chair of the medical advisory board of the CSF Leak Association; has served on advisory boards for Allergan, Autonomic Technologies Inc., Eli Lilly, Novartis, Pfizer, Salvia and TEVA; has received payment for educational presentations from Allergan, electroCore, Eli Lilly, Novartis and TEVA; has received grants from Abbott, Medtronic and electroCore and has a patent on system and method for diagnosing and treating headaches (WO2018051103A1, issued).

## Data availability statement

Data sharing not applicable to this article as no data sets were generated or analysed during this study.

## Funding

The author(s) received no financial support for the research, authorship and/or publication of this article.

## ORCID iD

Sanjay Cheema  <https://orcid.org/0000-0002-5438-6549>

## References

1. Giuliani G, Zilli C, Caramia F, et al. SUNCT syndrome secondary to multiple sclerosis: Not only trigeminal neuralgia. *Multi Scler J* 2024; in press.
2. Headache Classification Committee of the International Headache Society. The International Classification of Headache Disorders, 3rd edition. *Cephalalgia* 2018; 38(1): 1–211.

Multiple Sclerosis Journal

1–2

DOI: 10.1177/  
13524585241238131

© The Author(s), 2024.



Article reuse guidelines:  
[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

Correspondence to:

**S Cheema**  
Headache and Facial Pain  
Group, University College  
London (UCL) Queen Square  
Institute of Neurology and  
The National Hospital for  
Neurology and Neurosurgery,  
Queen Square, London  
WC1N 3BG, UK.  
[s.cheema@ucl.ac.uk](mailto:s.cheema@ucl.ac.uk)

**Sanjay Cheema**  
**Manjit Matharu**  
Headache and Facial Pain  
Group, University College  
London (UCL) Queen Square  
Institute of Neurology and  
The National Hospital for  
Neurology and Neurosurgery,  
London, UK

Visit SAGE journals online  
[journals.sagepub.com/  
home/msj](http://journals.sagepub.com/home/msj)

 Sage journals

3. Di Stefano G, Maarbjerg S and Truini A. Trigeminal neuralgia secondary to multiple sclerosis: From the clinical picture to the treatment options. *J Headache Pain* 2019; 20(1): 20.
4. Lambru G and Matharu MS. SUNCT, SUNA and trigeminal neuralgia: Different disorders or variants of the same disorder? *Curr Opin Neurol* 2014; 27(3): 325–331.
5. Lambru G, Stubberud A, Rantell K, et al. Medical treatment of SUNCT and SUNA: A prospective open-label study including single-arm meta-analysis. *J Neurol Neurosurg Psychiatry* 2021; 92(3): 233–241.