Actigraphy and self-assessed sleep study show increased sleep latency and sleep related stress in cluster headache (CH)

Caroline Ran¹, Felicia Jennysdotter Olofsgård¹, Anna Steinberg^{2,3}, Katrin Wellfelt¹, Christina Sjöstrand^{2,4}, Elisabet Waldenlind^{2,3}, Anna Dahlgren², Andrea Carmine Belin¹

Centre for cluster headache, Department of Neuroscience, 2. Department of Clinical Neuroscience, Karolinska Institutet,
Department of Neurology, Danderyd Hospital, 4. Department of Neurology, Karolinska University Hospital, Stockholm, Sweden

This study was recently published in the Journal of Headache and pain

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Results Actigraphy:

Patients with CH have increased sleep latency.

Control Cluster Headache In Bout In Remission

Conclusions:

Patients with CH experience sleep difficulties which are suggestive of insomnia.

Symptoms were worse in chronic patients and in patients in active bout. They are not solely attributed to having nightly attacks, and they persist in remission.

This study stresses the importance of considering sleep when treating CH.

Introduction:

CH attacks often occur with a circadian pattern, most commonly during the night. Previous studies with actigraphy and polysomnography have found mild sleep disturbances in CH.

% of patients Attack distribution over 24 hours



Results Sleep Diaries:



Adapted from Fourier et al., Neurology 2022

Aim:

Investigate how disturbed sleep is related to the CH phenotype. Specifically, we wanted to:

- Explore sleep in CH patients in a large Swedish patient cohort using actigraphy and sleep diaries.
- Analyze sleep in relation to phenotype, disease status and the occurrence of nightly attacks.
- Address age and sex differences and coping mechanisms.

Patients with CH had overall worse sleep, difficulties falling asleep and felt less rested.



Methods:

Sleep recorded for 2 weeks in 50 patients and 42 controls

- MotionWatch 8 actigraphs (CamNTech) worn at night.
- Fill out the Karolinska Sleep Diary every morning.
- Blinded analysis.



Example data: Healthy control on a work day

Karolinska Instiutet

Centre for cluster headache Department of Neuroscience Solnavägen 9, 171 65 Solna, Sweden Contact:

Caroline Ran, PhD E-mail: <u>caroline.ran@ki.se</u>

Web: <u>https://ki.se/en/research/centre-for-cluster-headache</u>

* p-value<0.05, ** p-value significant after testing for multiple comparisons, *** p-value<0.001. Sleep Quality Index (SQI), was calculated by using the mean of 4 sleep parameters: "ease falling asleep', 'sleep quality', 'calm sleep', and 'slept throughout'".



Centre for cluster headache: our aim is to conduct research on topics relating to CH in order to enhance the quality of life for patients.



