



The Prevalence of Hypnic Headache in Iceland

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Objectives

- To determine the prevalence of hypnic headache in Iceland in a population-based sample.

Background

- Hypnic headache is a rare headache disorder. The exact prevalence is unknown since there are no published prevalence studies.
- With a target enrollment of 100,000 Icelanders during the next 10 year period, SAGA cohort is a population-based longitudinal study of the combined influence of inheritance, psychological stress, and modern lifestyle on various indices of health, including migraine.
- In a pilot study for the SAGA study participants answer an extensive online Icelandic language questionnaire on various exposures and health measures.

Methods

- Women were recruited through a routine cancer screening program offered to all women in Iceland aged 20-69 years. Men were a random sample (aged 20-69) from the national registry identified by Statistics Iceland.
- Of 1398 invited adults, 921 (66%) participated; 402 men (average age 45.6 years, SD 13.2) and 519 women (52.6 years, SD 11.1).
- Subjects answered an internet-based headache questionnaire including 16 screening questions on headache symptoms (based on ICHD-3 beta criteria) and 3 questions on headache treatment.
- The questionnaire included a screening question for hypnic headache: "Do you have a headache that occurs only during sleep and causes waking?" A neurologist (JHE) interviewed the participants who answered "yes" to the screening question for hypnic headache. Diagnosis of hypnic headache was made by clinical interview (JHE) using ICHD-3 criteria.

Results

- Among 921 participants 6 screened positive for hypnic headache and of those two cases 0.22% (95% CI 0.06-0.79%) had probable hypnic headache, none had definite hypnic headache and four had migraine.**
- Both cases of probable hypnic headache were women aged over 50 years and in both cases the criteria not fulfilled was the number of attacks (≥ 10 per month for 3 months, table 1).
- Both had bilateral headache attacks of rather short duration (60-90 minutes) waking them from sleep. There were no cranial autonomic symptoms or restlessness.

Table 1. Diagnostic criteria for hypnic headache according to ICHD-3 criteria

- A. Recurrent headache attacks fulfilling criteria B-E
- B. Developing only during sleep, and causing waking
- C. Occurring on ≥ 10 days/month for >3 months
- D. Lasting from 15 minutes up to 4 hours after waking
- E. No cranial autonomic symptoms or restlessness
- F. Not better accounted for by another ICHD-3 diagnosis

Conclusion

- Our estimate for the prevalence of probable hypnic headache is 0.22%, but we found no cases of definite hypnic headache, confirming that hypnic headache is a rare disorder.**
- To find an accurate prevalence of hypnic headache a study with larger sample size is needed.
- The frequency criterion for hypnic headache is possibly too strict and a revision may be considered in ICHD-4.