

Migraine is not only headache

**The interictal phase:
neither symptom-free
nor burden-free**



Timothy J Steiner

Danish Headache Centre, University of Copenhagen,
Copenhagen, Denmark

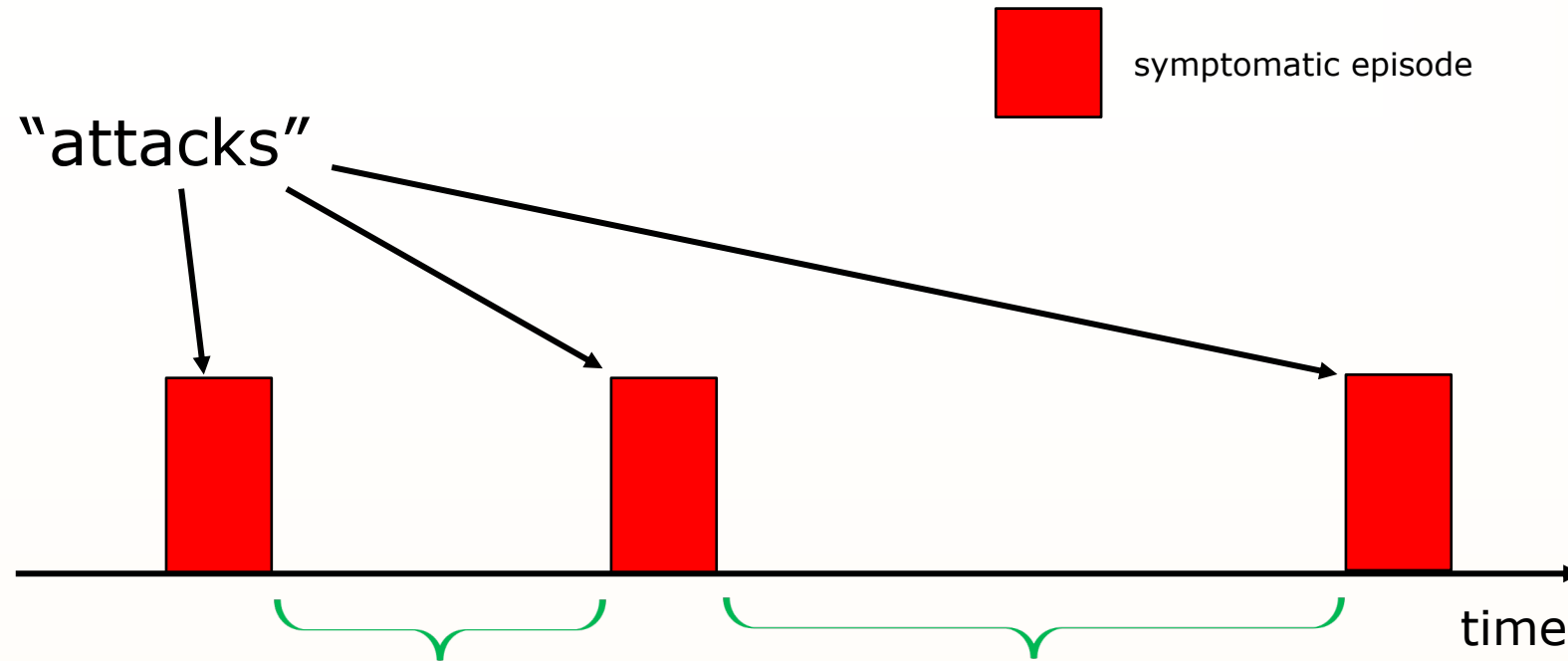
Norwegian University of Science and Technology,
Trondheim, Norway

Imperial College London, London, UK

Global Campaign Director,
Lifting The Burden

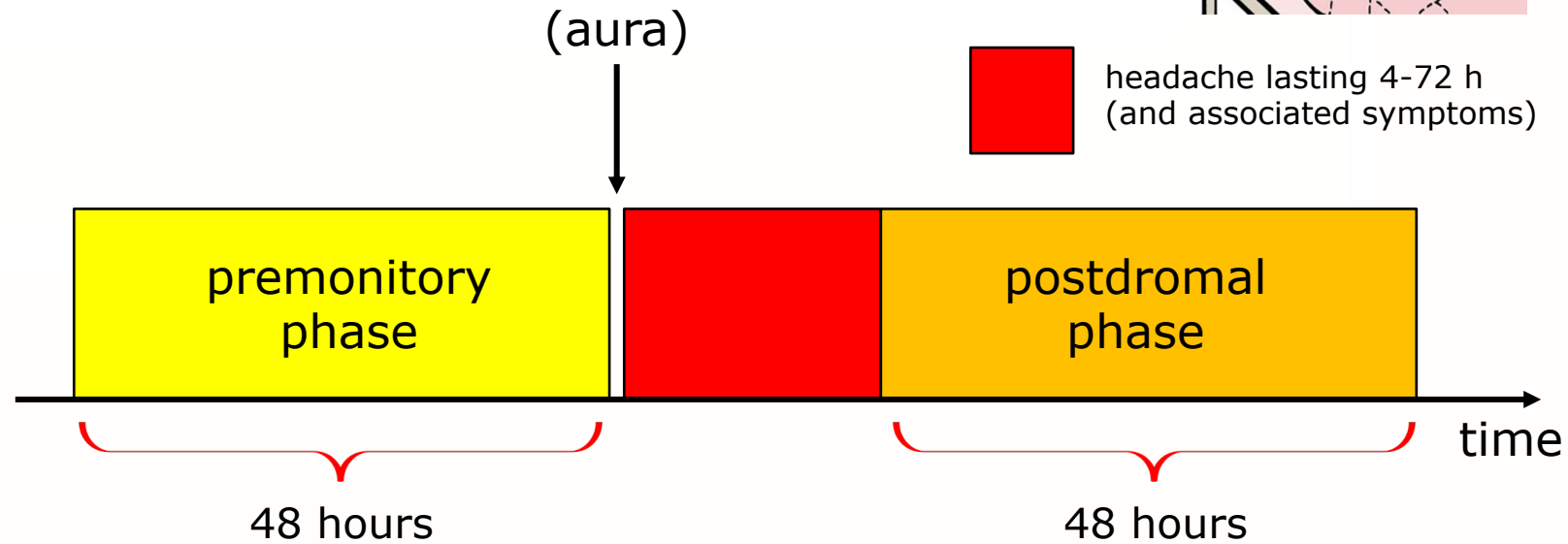
Migraine is not only headache

**Most migraine is episodic,
with attacks (symptomatic episodes) occurring
regularly or randomly**



Migraine is not only headache

The attack



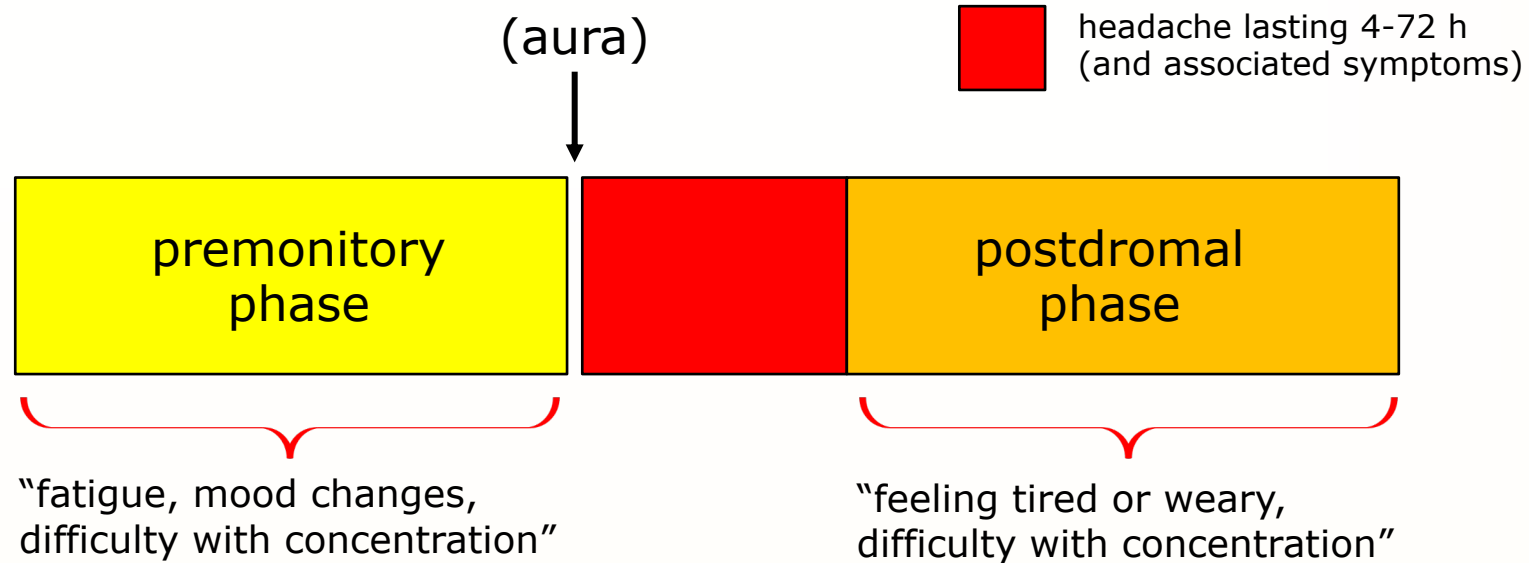
“Prodrome: A symptomatic phase, lasting ≤ 48 h, occurring before the onset of pain ... or of aura”

“Postdrome: A symptomatic phase, lasting ≤ 48 h, following the resolution of pain in migraine attacks”

Headache Classification
Committee of IHS.
Cephalalgia 2018;38:1-211

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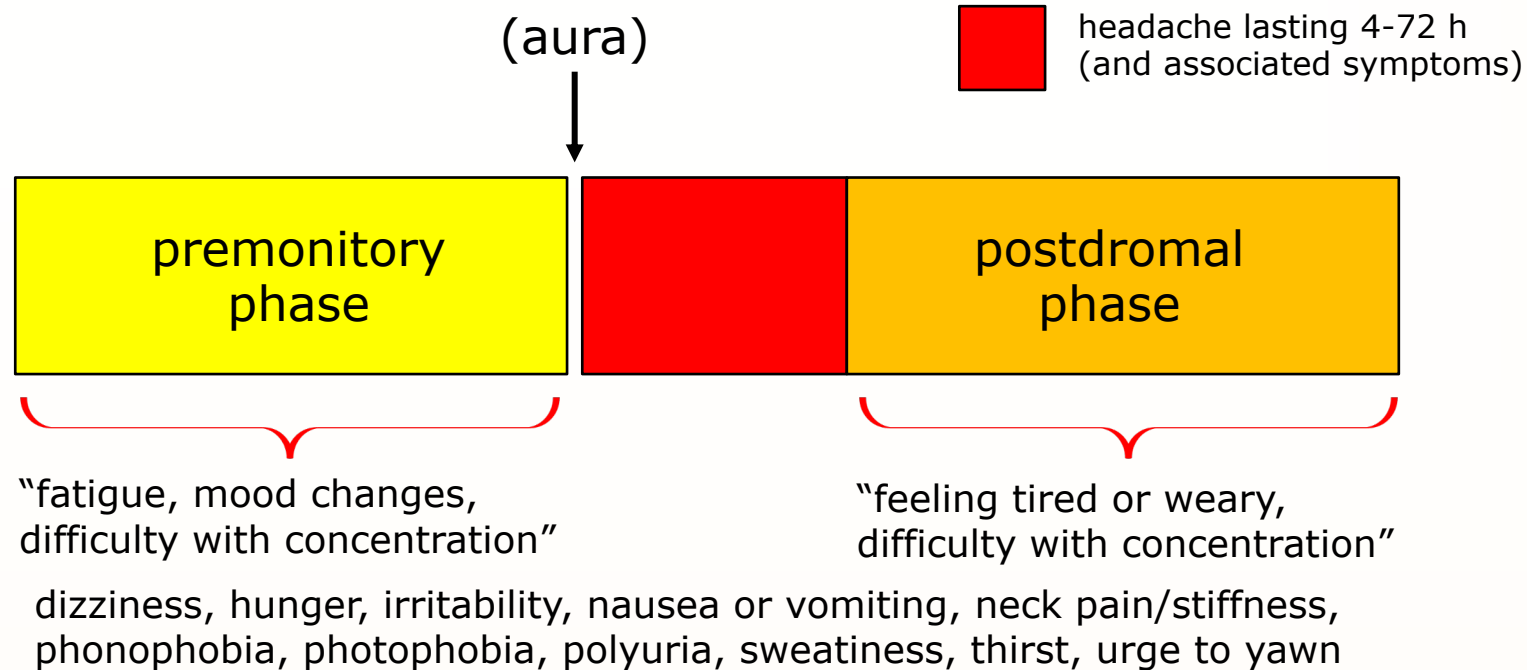
Premonitory and postdromal symptoms



Headache Classification Committee of IHS.
Cephalalgia 2018;38:1-211.

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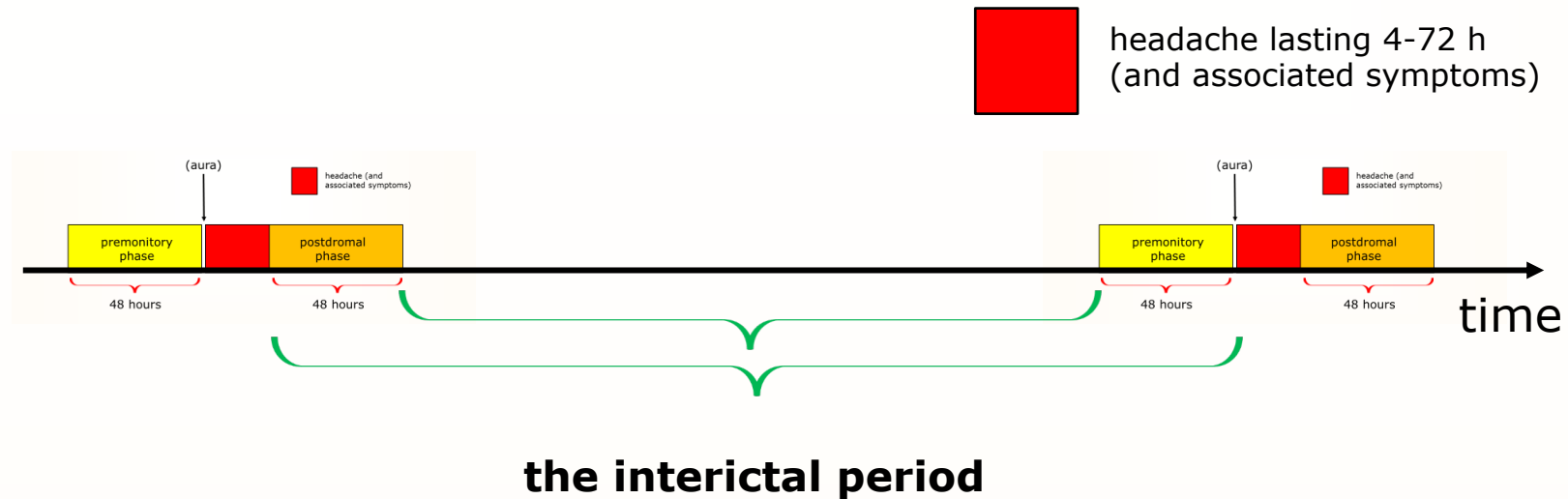
Premonitory and postdromal symptoms



Peng KP, May A. *Cephalalgia* 2020;40:866-870.
Eigenbrodt AK et al. *J Headache Pain* 2022;23:140.
Giffin NJ et al. *Neurology* 2016;87:309-313.

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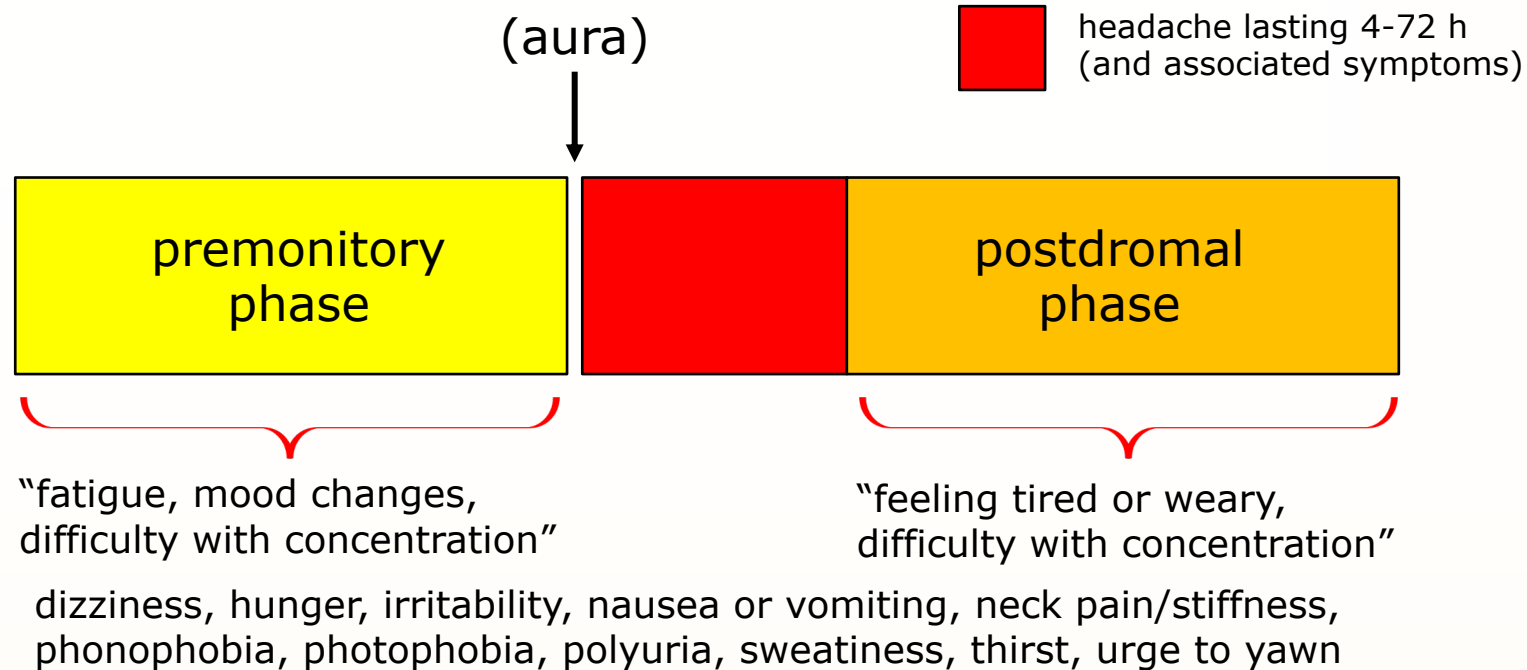
Interictal period: the period between "attacks"



Headache Classification Committee of IHS.
Cephalalgia 2018;38:1-211.

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Premonitory and postdromal symptoms



Peng KP, May A. *Cephalalgia* 2020;40:866-870.
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Interictal symptoms of migraine in Eurolight

**A study within the
Global Campaign against Headache**



“Please think carefully about the last day when you did not have a headache.”

- Cross-sectional survey, largely population-based
- N = 8,412
- In 9 countries representing, 55% of adult EU population
- Variety of sampling methods
- Migraine data from N = 2,959

Lampl C et al.
J Headache Pain 2016;17:9

Interictal symptoms of migraine in Eurolight

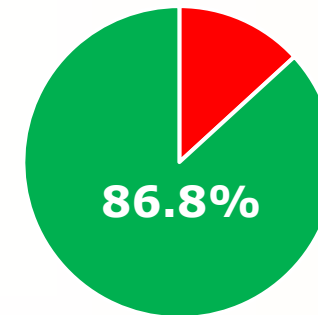
- anxiety about next attack
- avoidance of potential triggers

Participants reporting interictal symptoms (N=2,959)

Not free of all symptoms (%)	Interictal anxiety (%)	Interictal avoidance (%)
26.0	10.6	14.8



proportion of time



■ ictal ■ interictal

Lampl C et al.
J Headache Pain 2016;17:9

Interictal symptoms of migraine in Eurolight



Probability of interictal symptoms by ictal burden (N=2,959)

Ictal burden measure	Interictal anxiety	Interictal avoidance
	Odds ratio	
Headache intensity (ref "not bad")	-	-
"bad"	2.8	1.6
"very bad"	7.6	3.0
Headache frequency (d/y) (ref ≤12)	-	-
13-24	2.4	1.6
25-48	2.5	2.0
49-90	3.7	2.7
>90	6.4	2.5

Lampl C et al.
J Headache Pain 2016;17:9

Interictal symptoms of migraine in Eurolight



- anxiety about next attack
- avoidance of potential triggers

leading to

- lifestyle compromise
- reduced quality of life



Evidence of stigma associated with migraine in Eurolight



- avoid telling others about (my) migraine
- others do not understand (my) migraine



Evidence of stigma associated with migraine in Eurolight



Participants reporting stigma (N=2,959)

Avoid telling others (%)	Family, friends do not understand (%)	Employer, colleagues do not understand (%)
30.8	10.2	11.8

Lampl C et al.
J Headache Pain 2016;17:9

Cumulative burdens of migraine in Eurolight



Missed opportunities through chronic recurring disability

- in education
 - in employment
- resulting in*
- damaged education
 - damaged careers

Participants reporting cumulative burdens (N=2,959)

Done less well in education (%)	Careers suffered (%)	Taken easier jobs (%)	Long-term sick leave (%)
11.8	7.4	2.1	1.4

Lampl C et al.
J Headache Pain 2016;17:9

Cumulative burdens of migraine in Eurolight



Missed opportunities through chronic recurring disability

- in education
- in employment

resulting in

- damaged education
- damaged careers

leading to

- reduced achievement and earnings over a lifetime



Cumulative burdens of migraine in Eurolight



Missed opportunities through chronic recurring disability

- in education
- in employment

Participants reporting reduced lifetime earnings (N=2,959)

Reduced earnings (%)
5.9

resulting in

- damaged education
- damaged careers

leading to

- reduced achievement and earnings over a lifetime

Lampl C et al.
J Headache Pain 2016;17:9

Cumulative burdens of migraine in Eurolight



Missed opportunities through chronic recurring disability

- in education
- in employment
- and in social and family life



Cumulative burdens of migraine in Eurolight



Missed opportunities through chronic recurring disability

- in social and family life

Participants reporting cumulative burden (N=2,959)

Difficulties in love life (%)	Fewer (or no) children (%)	Marital separation (%)	Divorce (%)
17.6	1.0	0.5	0.2

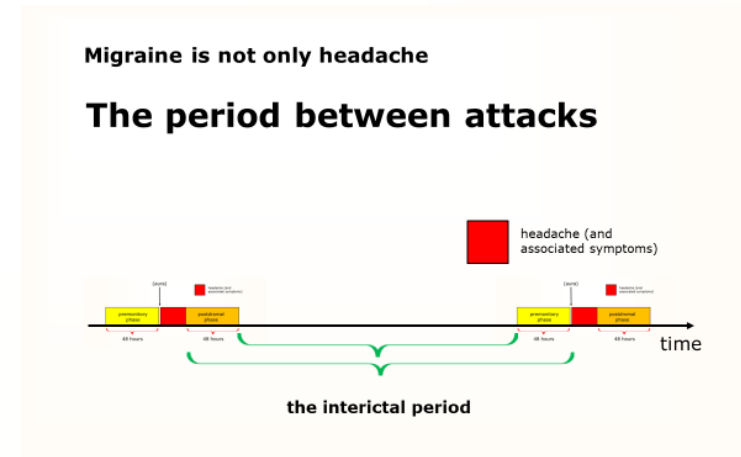
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The interictal phase: neither symptom-free nor burden-free

Conclusions

- interictal symptoms in migraine are common
- they are associated with burden, which is poorly quantified
- burden is amplified: 87% of all time is spent in the interictal state
- some burden can be cumulative over a lifetime



Lost-health burden: YLDs attributed to migraine (GBD2016)

Steiner et al. *The Journal of Headache and Pain* (2018) 19:17
<https://doi.org/10.1186/s10194-018-0846-2>

The Journal of Headache
and Pain

EDITORIAL

Open Access

Migraine is *first* cause of disability in under 50s: will health politicians now take notice?



Timothy J. Steiner^{1,2*}, Lars J. Stovner^{1,3}, Theo Vos⁴, R. Jensen⁵ and Z. Katsarava^{6,7}

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