

# Post-traumatic headache phenotype and clinical characteristics

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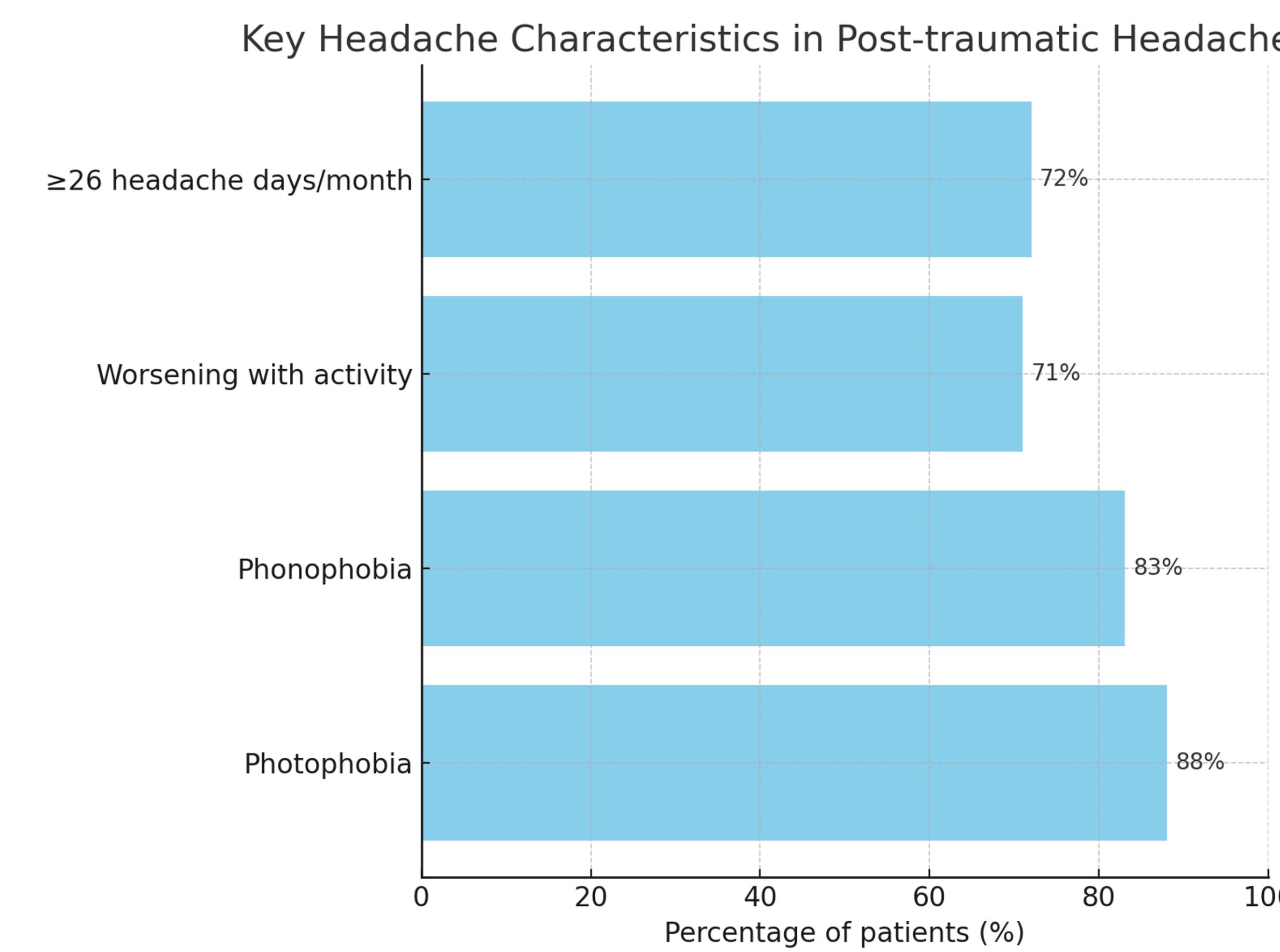
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## Objective

To describe the phenotype and characteristics of post-traumatic headache (PTH) in patients assessed by a neurologist in an outpatient concussion clinic, to inform future diagnostic criteria and management strategies.

## Methods

- **Design:** Retrospective cohort; demographics, pre-injury history, comorbidities, medication use, and headache characteristics were extracted, and descriptive statistics were calculated
- **Inclusion:** Patients with PTH following mild traumatic brain injury (mTBI), assessed by a neurologist at a Canadian specialty clinic
- **Exclusion:** moderate-to-severe TBI, or headache resolution prior to consultation



## Results

### Demographics and comorbidities

- N = 405
- Median age: 38 (IQR: 27,50) 298 (74%) female
- Median time from injury: 37 days (IQR: 13, 126)
- 138 (34%) had prior migraine disorder and 85 (21%) reported family history of migraine
- 201 (50%) reported psychiatric conditions and 84 (21%) had ongoing symptoms after a previous mTBI
- 178 (44%) had pending litigation or insurance claims

### Headache characteristics

- Headache frequency: ≥26 days/month in 292 (72%)
- Headache was continuous in 114 (28%), lasted hours-to-days in 215 (53%)
- Headache unilateral in 174 (43%)
- Headache quality was pulsating in 260 (64%)
- Median headache severity: 7 (IQR: 5,8) on a scale of 0-10
- Worsening with routine physical activity: in 287 (71%)
- Nausea in 279 (69%), photophobia in 358 (88%) and phonophobia in 337 (83%)
- 207 (51%) preferred lying down; 147 (36%) had no positional preference

### Treatments prior to consultation

- 143 (35%) reported daily use of acute medications
- Preventive medications tried prior to consultation:
  - tricyclics: 99 (24%)
  - gabapentinoids: (8%)
  - beta blockers: 21 (5%)

### Impact

- Only 66 (16%) had returned to full work/school

## Conclusions

While select migraine features are common in PTH, there are distinct characteristics, including a tendency for daily or near daily headache of long duration. The latter may suggest early sensitization. There is a high risk of medication overuse headache in PTH. Unilaterality is often absent.