

This summary is to explain new research in IIH. This research focus is on what was learnt regarding headaches in people with IIH from the IIHWT clinical trial. This research article on headaches in IIH can be downloaded for free at:

<https://thejournalofheadacheandpain.biomedcentral.com/articles/10.1186/s10194-021-01321-8>

What is the problem, and what is the aim of this research?

The majority of people with IIH have disabling headaches. The aims of this study were to describe headache characteristics in people with IIH and explore the relationship between brain pressure and headache features.

How was this research done?

66 women with IIH were recruited to the IIHWT clinical trial (<https://jamanetwork.com/journals/jamaneurology/fullarticle/2778650>).

This research paper aimed to describe their headaches at the start of the trial. The researchers then wished to understand what happened to the headaches after weight loss intervention – either weight loss surgery or 12 months of Weight Watchers.

The patients recorded how bad their headaches were with diaries. The diaries included key headache characteristics such as severity, how long the headaches lasted (duration), how often the headaches happened (frequency) and what pain-relief was used.

In addition to writing the headache diary, the participants completed the headache impact test-6 (HIT-6) and short form health-36 (SF-36) questionnaires. The HIT-6 survey quantifies the impact of headaches on daily functioning and psychological distress while the SF-36 survey quantifies overall health-related quality of life.

What are the results of this study?

At the start of the trial 63 of 66 participants reported having headaches. Of these 63 people, 57 reported headaches that had features of migraine (termed migraine-like). These headaches were chronic (as they happened more than 15 days in the month) in 40 people. Headaches typically occurred on both sides of the head rather than one side.

More than half of the people in the study reported the following symptoms:

- cutaneous allodynia (pain caused by light touch),
- throbbing or pressure sensation,
- sensitivity to light and sound,
- nausea,
- rhythmical noises in the ears that matched the heartbeat (pulsatile tinnitus).

Less than half the people in the study reported the following symptoms:

- aura (temporary visual disturbances before the headache),
- shooting or stabbing pain,
- sensitivity to smell,
- vomiting,
- dizziness.

Other features such as sweating, facial flushing, runny nose and tearing were rare.

Headaches were commonly worse on exercise, but some reported worsening on lying flat, bending over and straining. Based on the HIT-6 questionnaire results, the headaches had a substantial impact on daily functioning and caused distress.

The brain pressure (as measured by lumbar puncture opening pressure) was significantly reduced for all people in the study after weight loss intervention at 12 and 24 months, and this was associated with a reduction in the headaches. Importantly, the headache severity and frequency reduced. Cutaneous allodynia was also improved with reduced brain pressure. Importantly, the more brain pressure was reduced, the more headaches improved. The reduction in headache severity was associated with improved physical functioning based on the quality of life SF-36 survey.

What has this research taught us?

IIH headaches often happen daily and are migraine-like. IIH headaches significantly impact the quality of life of a person with IIH. This study is the first to show that these headaches are related to high brain pressure and can be improved by weight loss that causes a reduction in brain pressure.

Want to know more?

This is a review on headaches in people with IIH which is free to download:

<https://headachejournal.onlinelibrary.wiley.com/doi/10.1111/head.14125>

Who wrote this summary?

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