

## Biofeedback Treatment for Pediatric Migraines

**Biofeedback** and **relaxation training** have proven to be promising treatments for children with migraine headaches.



biofeedback for pediatric migraines at the brain clinic

A recent review article (Hermann & Blanchard, 2002) summarized headache/biofeedback research to date in children and concluded that thermal biofeedback is effective in alleviating headache activity in children; most studies showed more than two-thirds of the children had a 50% symptom reduction. Most protocols used 10 sessions or fewer and included home practice; some involved the parents also.

For example, five children with tension-type headaches (Arndorfer & Allen, 2001) participated in a multiple-baseline, time-lagged, within-subject design using thermal biofeedback. All learned the hand-warming technique and showed significant clinical improvement, and six months afterward, 80% were headache-free. Labbe (1995) studied thermal biofeedback-assisted autogenic training in 30 migrainous children; 80% of children receiving biofeedback for pediatric migraines had significant improvement.

Finally, Damen et al. (2006) conducted a systematic review of 19 studies of nonpharmacological treatment in children; they reported biofeedback with relaxation was the most effective for treating pediatric migraines.

For more information about thermal biofeedback, please visit [types of biofeedback](#).

### References:

Arndorfer, RE, & Allen, KD (2001). Extending the efficacy of a thermal biofeedback treatment package to the management of tension-type headaches in children. *Headache*, 41(2), 183-92. <https://www.ncbi.nlm.nih.gov/pubmed/11251704>

Damen, L, Bruijn, J, Koes, BW, Berger, MY, Passchier, J, & Verhagen, AP (2006). Prophylactic treatment of migraine in children: Part 1. A systematic review of nonpharmacological trials. *Cephalalgia*, 26(4), 373-383. <https://journals.sagepub.com/doi/abs/10.1111/j.1468-2982.2005.01046.x>

Hermann, C & Blanchard, EB (2002). Biofeedback in the treatment of headache and other childhood pain. *Applied Psychophysiology & Biofeedback*, 27(2), 143-162. <https://psycnet.apa.org/record/2002-15748-003>

Labbe, EE (1995). Treatment of childhood migraine with autogenic training and skin temperature biofeedback: A component analysis. *Headache*, 35(1), 10-13. <https://link.springer.com/article/10.1023/A:1016295727345>

Contact us for an appointment!

