

PubMed

**Format:** AbstractJ Neurosurg Sci. 1985 Jul-Sep;29(3):239-48.

## Serotonin precursors in chronic primary headache. A double-blind cross-over study with L-5-hydroxytryptophan vs. placebo.

De Benedittis G, Massei R.

### Abstract

Serotonin (5-HT) plays a crucial role in mediating the descending pain inhibitory systems and in the pathophysiology of migraine. Previous studies regarding the use of 5-Hydroxytryptophan (5-HTP), the active precursor of 5-HT, in the treatment of Chronic Primary Headache (CPH) have been inconclusive so far. In order to assess the efficacy of the serotonin active precursor in chronic headache prophylaxis, a double-blind cross-over study has been carried out in 31 patients with CPH, comparing L-5-HTP to placebo. Clinical syndromes included: (a) migraine (16 patients); (b) mixed headache (6 patients); (c) psychogenic headache (5 patients); (d) muscle contraction headache (4 patients). L-5-HTP was administered for two months at daily doses of 400 mg p.o. The reduction in severity and frequency of headache in patients taking the active drug and placebo was noted. Mood patterns were also taken into consideration. L-5-HTP proved to be more effective than placebo in reducing both headache frequency and severity, but the difference was not statistically significant. Favourable responses (greater than 50% average reduction in headache symptoms) were obtained in 48% of the cases after the second month of treatment. No significant difference in therapeutic response was observed as related to different clinical syndromes, except for psychogenic headache patients, who responded poorly to the active drug. Side effects, experienced in 19% of the cases, were generally mild and transient. We conclude that L-5-HTP is a medication of moderate efficacy and remarkable safety, providing us with another alternative approach to CPH prophylaxis.

PMID: 3913752

[Indexed for MEDLINE]

**Publication types, MeSH terms, Substances** **LinkOut - more resources** **PubMed Commons**[PubMed Commons home](#)

0 comments

[How to join PubMed Commons](#)