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## Autogenic training for tension type headaches: a systematic review of controlled trials

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### CRD summary

This well-conducted review compared autogenic training (AT) with cognitive coping, biofeedback or hypnosis for tension-type headaches in adults. Given the paucity of good-quality studies included in their review, the authors concluded that there was insufficient evidence to reach conclusions on the effectiveness of AT. These conclusions are likely to be reliable.

### Authors' objectives

To determine the effectiveness of autogenic training (AT) (a self-help relaxation technique) in the prevention of tension-type headaches in adults.

### Searching

MEDLINE, EMBASE, AMED, the Cochrane CENTRAL Register, PsycINFO and CINAHL were searched. The search dates covered 1969 to January 2005 and keywords were reported. Reference lists of retrieved articles, published reviews, textbooks and papers in the British Autogenic Society Library were also screened. Only published papers were included.

### Study selection

#### Study designs of evaluations included in the review

Controlled trials were eligible for inclusion.

#### Specific interventions included in the review

Studies that compared AT alone with an alternative active treatment or control were eligible for inclusion. The AT treatment had to consist of at least 3 training sessions with three basic exercises, with or without additional exercises or home practice. Studies that used tape-cassettes for training were eligible. In the included studies, treatment ranged from 3 to 10 sessions with no, or up to twice daily, home practice. Comparisons included training in cognitive coping skills, galvanic skin resistance (biofeedback), electromyography relaxation training, self-hypnosis, future oriented hypnotic imagery and waiting list. Some studies used more than one control group.

#### Participants included in the review

Adults with tension-type headache were eligible for inclusion. The participants included both males and females with a mean age ranging from 23 to 45 years. The participants generally represented those with more severe tension-type headache and were mostly recruited from secondary care.

#### Outcomes assessed in the review

Explicit inclusion criteria for the outcomes were not stated. The main outcomes evaluated in the included studies were headache 'activity', intensity, and headache index scores. The follow-up period ranged from 28 days to 1 year.

#### How were decisions on the relevance of primary studies made?

Two reviewers independently assessed papers for inclusion.

### Assessment of study quality

Study quality was assessed using five criteria from the Cochrane guidelines: adequacy of randomisation, allocation concealment, control for cointerventions, descriptions of withdrawals or drop-outs, and intention-to-treat analysis. Baseline comparability of the groups was also examined. The authors did not state how the validity assessment was performed.

### **Data extraction**

Two reviewers independently data extracted the papers, and any disagreements were resolved by discussion. For crossover studies, only data from the first arms were extracted.

### **Methods of synthesis**

#### **How were the studies combined?**

The studies were described narratively.

#### **How were differences between studies investigated?**

The studies were grouped by comparison type.

### **Results of the review**

Seven studies (n=400) were included: five randomised controlled trials and two non-randomised controlled trials.

None of the studies adequately reported on methods of randomisation or allocation concealment, or used a blinded outcome assessor.

The results from one study that compared AT with cognitive coping were not interpretable because of the small sample size. Two studies reported that headache was significantly improved with biofeedback in comparison with AT (statistical results were not reported). Four studies reported no significant differences in headache index scores between those receiving various forms of hypnosis and those receiving AT.

### **Authors' conclusions**

Due to insufficient evidence, no conclusions could be drawn about the effectiveness of standard AT for tension-type headache.

### **CRD commentary**

The inclusion criteria were clearly defined for the intervention of interest, but remained broad for the participants and outcomes. The authors searched a number of relevant databases and efforts were made to find further information by reviewing reference lists and a specialist library. It was not stated if language restrictions were applied, therefore language bias cannot be ruled out. In addition, only published studies were included in the review, thus introducing publication bias. Study quality was assessed using appropriate criteria. Sufficient detail was presented for each study, with the exception that any statistical results were not reported. Generally, this review appears to have been well-conducted, and the lack of definitive conclusions correctly reflects the paucity of good-quality studies.

### **Implications of the review for practice and research**

Practice: The authors did not state any implications for practice.

Research: The authors stated that further research on standard AT, particularly comparisons with biofeedback in primary care patients with moderate symptoms, is warranted.

### **Bibliographic details**

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