Anti-hypertensive effects of autogenic training: a systematic review
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Authors' objectives
To evaluate all controlled trials of autogenic training as an intervention to lower blood pressure.

Searching
MEDLINE (1969 to 1997), PsycLIT (1974 to March 1998), CINAHL (1982 to January 1998) and CISCOM, which includes unpublished studies (April 1998), were searched. Reference lists of retrieved reports, published review articles, various textbooks, and Luthe's extensive collection of papers held by the Library of the British Autogenic Society Library were also screened. Keywords were 'autogenic training' and 'hypertension'.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs) and controlled trials (CTs) of autogenic training for hypertension were included.

Specific interventions included in the review
The following components of autogenic training were studied and compared to control therapy consisting of no treatment, placebo (packaged like atenolol) or self-relaxation: autogenic training phrases tape-recorded; sensation of relaxation; Schultz and Luthe's technique (see Other Publications of Related Interest no.1); Schultz technique; and warmth and lightness. Autogenic training was conducted both in sessions and with home practice.

Participants included in the review
Patients of both sexes with hypertension, including essential hypertension, were included. Subjects included those recruited from a Cardiology Research Centre, hypertensive clinic, and through a newspaper advertisement.

Outcomes assessed in the review
The primary outcome assessed was blood pressure.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the authors performed the selection.

Assessment of study quality
Comment was made on the following aspects of validity in the text of the review: study design; use of control group; description of subjects characteristics; cointerventions; description of intervention; description of methods used to assess outcome; blinding of outcome assessor; and adequacy of detail of statistical analysis. No formal validity assessment was conducted.

Data extraction
The following data were extracted in a pre-defined standardised manner: country of origin; study design; type of subjects; number and gender of subjects; whether the correct number and length of instructional sessions was observed; treatment and control conditions; details of autogenic training procedure utilised and whether in correct or corrupted form; whether adverse effects and withdrawal of subjects were reported; and overall measures, follow-up and overall findings summarised. Methods used to extract data were not described.

Methods of synthesis
How were the studies combined?
The studies were combined in a narrative review.

How were differences between studies investigated?
Differences between the studies were discussed.

**Results of the review**

Five controlled trials (3 RCTs with 255 patients and 2 CTs with 50 patients) were included.

Three studies were conducted in the USSR, one in Italy and one involved centres in USA and USSR.

Methodological flaws included lack of detail of the following: source of subjects; type of hypertension; instructions used for autogenic training; use of culturally compatible tests; methods used to record blood pressure (including person measuring blood pressure, time of day, site of cuff, equipment, posture of subject, and blinding of assessor); concomitant use of anti-hypertensive medication; and statistical analysis. None of the studies reported any adverse effects of treatments given.

Four studies reported significantly positive effects of autogenic training in reducing blood pressure. The fifth study reported no effect.

**Authors' conclusions**

Four of the five identified studies reported anti-hypertensive effects of autogenic training. The majority of trials were methodologically flawed. The notion that autogenic training lowers blood pressure is not based on the evidence from rigorous clinical trials.

**CRD commentary**

The aims and inclusion criteria were stated. Published and unpublished studies were sought. Relevant details of the primary studies was clearly presented. Aspects of validity were discussed though no formal assessment was undertaken. Given the small number of studies and heterogeneity among studies, a narrative review was appropriate. The discussion includes consideration of the methodological flaws in the primary studies detailed above in the 'results' section.

It was not stated whether or not language restrictions were applied to primary studies. No details were given of methods used to select studies, extract data or assess validity.

The evidence presented supports the author's conclusion.

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

The authors did not state any implications for further research and practice.

**Bibliographic details**


**Other publications of related interest**


**Indexing Status**

Subject indexing assigned by CRD

**MeSH**

Autogenic Training; Hypertension /therapy
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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.