Muscle relaxation techniques: a therapeutic tool for family physicians

MORTON S. RAPP,* MD
MARTYN R. THOMAS,† MA
MARK G. LEITH,‡ MD

Muscle relaxation techniques are important adjunctive therapy for anxiety-related conditions. Family physicians can learn to teach the techniques so as to try helping anxious patients themselves rather than automatically referring them to a psychiatrist. The exercises are generally acceptable to patients, are easy to learn and do not require expensive equipment. They are beneficial in insomnia and tension headache, of some value in chronic anxiety states and a useful adjunct in hypertension. In this paper the evidence supporting the value of muscle relaxation therapy is briefly reviewed, methods of teaching and of practising the techniques are described in detail, and answers to some of the questions and problems that may arise are presented.

Les techniques de relaxation musculaire aident considérablement au traitement de troubles reliés à l'anxiété. Le médecin de famille peut apprendre l'enseignement de ces techniques de façon à tenter d'aider ses patients anxieux lui-même, plutôt que de les adresser systématiquement à un psychiatre. Les exercices sont généralement acceptables au patient, sont faciles à apprendre et ne requièrent pas d'équipement coûteux. Ils sont efficaces dans l'insomnie et la céphalée par tension nerveuse, sont d'une certaine valeur dans les états d'anxiété chronique et représentent un appoint thérapeutique utile dans l'hypertension. Cet article passe brièvement en revue les preuves de l'utilité de la thérapie par relaxation musculaire, il décrit en détail les méthodes d'enseignement et de pratique des techniques mises en cause, et il répond à certaines des questions ou problèmes qui peuvent se poser.

Muscle relaxation is a useful technique for selected patients in a family practice. But getting the most out of relaxation is important because the treatment takes up a lot of the patient's time. This paper explains how to enhance the efficacy of muscle relaxation through the use of techniques developed at our behaviour therapy unit.

Indications for relaxation

Relaxation techniques are useful for patients suffering from insomnia[1] and are possibly superior to biofeedback treatment.[2] Relaxation has been tested in the treatment of patients with tension headaches and found to be as effective as biofeedback.[3]

There has been increasing interest in nonpharmacologic techniques for the treatment of hypertension, not only because drug compliance is poor, but also because of the concern that antihypertensive drugs may cause memory loss.[4] Engel and associates[5] showed relaxation to be effective in reducing blood pressure, and at least two studies demonstrated that this effect is carried into the workplace.[6,7] There is evidence that biofeedback and meditative techniques can also be used for treating hypertension.[8] But biofeedback requires expensive equipment, and the data supporting its use have been widely criticized.[9-11]

In chronic anxiety no single treatment is effective, and a multimodal approach is required.[12] However, Raskin and colleagues[13] have shown that relaxation is at least as useful as biofeedback or transcendental meditation for chronic anxiety, although each was inadequate when used alone.

Thus, several of the most common complaints presented in general practice may respond to a simple and safe technique. Meditation and hypnosis are often unacceptable to North American patients, whereas the relaxation concept makes sense to most patients and thus is more likely to be used.

Limitations and contraindications

Relaxation techniques are rarely useful as the sole treatment method. This is particularly true in hypertension. These techniques are unlikely to help in psychotic or borderline states, severe depression or any condition lacking manifest anxiety. Generally patients are accurate historians; if they say they are anxious, they are. There is an occasional exception to this rule. We have found some highly obsessional patients to complain of anxiety but to have scores within the normal range on such tests as the Taylor Manifest Anxiety Scale and to show low levels of autonomic activity. These patients do not benefit from relaxation. However, these cases are rare. Most patients with an obsessional person-

From the behaviour therapy unit, Sunnybrook Medical Centre, Toronto

*Associate professor, department of psychiatry, University of Toronto; director, behaviour therapy unit, Sunnybrook Medical Centre
†Coordinator, behaviour therapy unit, Sunnybrook Medical Centre
‡Lecturer, department of psychiatry, University of Toronto; assistant director, behaviour therapy unit, Sunnybrook Medical Centre

Reprint requests to: Dr. Morton S. Rapp, Rm. G-753, Sunnybrook Medical Centre, 2075 Bayview Ave., Toronto, Ont. M4N 3M5

ality who complain of anxiety are indeed anxious and may benefit from relaxation.

Edinger[14] reviewed the incidence and significance of side effects of relaxation therapy. Side effects were rare, and some (e.g., sexual arousal during treatment) were not specific for relaxation treatment. Others were, however. "Intrusive thoughts" and fears of "losing control" were common. But the potential of these to interfere with therapy can be minimized if the physician is aware that they can occur and asks about them during treatment. New psychotic symptoms virtually never arose during relaxation therapy.

Finding a suitable technique

Before settling on a detailed technique (e.g., manner, pace) obtain and listen to a number of tapes or records. Identify the techniques and mannerisms that make sense to you. Do not assume that everything you hear on a commercial tape is ideal. Listen to at least three. Exchange ideas with colleagues. Workshops on relaxation are given at conferences on behaviour therapy or behavioural medicine. There are a number of commercial tapes available.[15-18]

It is worth while to make your own tape. There is evidence that a tape with the voice of the patient's physician is more effective than one with an anonymous voice.[19]

Initiating the concept

It is not enough that the physician believe the treatment is indicated. The patient must believe it too and must be willing to spend 20 minutes daily in practice.

A complete explanation of the concept and technique may require 30 to 60 minutes. It should include the following steps:

- Explain why the patient is being offered relaxation treatment. If the patient has tried relaxation on his own and has been unsuccessful, it is probably because he was trying too hard. Explain that he cannot force relaxation, but only permit it. His body will relax when it is ready — not on demand. Many patients have had a previous unsuccessful attempt at relaxation therapy. The need to demonstrate why "it is going to work this time" cannot be overstressed.
- Discuss the muscles' reaction to stress and the fact that stress affects everyone in one way or another. Point out that the response to stress is often mediated through the muscles and that muscle relaxation techniques may reverse or slow down this response.
- Illustrate how the prolonged tensing of muscles produces discomfort and pain. (Have the patient hold a book on the palm of his hand, with the arm outstretched, for about 30 seconds.)
- Tell the patient you will teach him a method of systematically relaxing all the muscle groups in the body. Stress that this technique is not related to hypnosis and that the aim is to learn to relax muscles while being fully alert. Patients who have not responded to hypnosis are reassured by this.
- Demonstrate the simple technique of alternately tensing and relaxing muscles.
- Explain the benefit of a tape-recording in this form of therapy but stress that the main reason for using a tape is to pace the session so as to ensure that the patient does not practise too quickly. This underlines the fact that the results of therapy can be attributed to the patient, not to some magical quality of the tape.
- Arrange a second appointment and ask the patient to bring a blank 60-minute cassette tape. He may need a brief lesson in its use.

First session

Review the principles of therapy

Discuss briefly the topics covered during the previous appointment. Remind the patient that the technique will heighten his sensitivity to minor changes in muscle tension.

Demonstrate the technique

Give the instructions while talking into the tape-recorder. This part of the session should take 20 to 22 minutes. Leave 8 to 10 minutes of "dead time" on the cassette, and encourage the patient to remain in the chair for that period when practising at home. At the end of the session the tape will be ready for use.

Work systematically through all the muscle groups. First ask the patient to tense a muscle group and observe what the tense state feels like; then instruct him to "let go". (Do not use the word "relax" — if he could relax he wouldn't need your help.) Then ask him to observe the difference between when the muscles were tensed and when they were not. This self-observation should accompany each maneuver and be repeated several dozen times during the 20-minute procedure. The self-observation is more important than the actual tensing and letting go.

The muscle groups to be employed (with the actual motion) are: palmar (making a fist), hand extensors (extending the wrists), biceps (bending the arms at the elbows), shoulders (shrugging), facial muscles (arching the brows, frowning, shutting the eyes tightly, pressing the tongue against the palate, pursing the lips, opening the mouth wide), neck (moving the head forward and then backward), spinal (arching the back), chest wall (breathing deeply and slowly through the nose), abdominal (drawing in the "stomach"), thighs (straightening the legs from a sitting position), shins (pointing the toes upward), calves (plantar-flexing the feet) and toes (curling the toes). Others could be added or some of these omitted.

Correct any errors

This session is your opportunity to correct any errors in movement made by the patient. Write down those noticed and mention them at the end of the session; do not interrupt the tape-recording.

Common questions patients ask

What are the necessary conditions for practice? Ensure that you will not be disturbed for 30 minutes. The room should be not too bright (to avoid glare) or too dark. (This will facilitate visual illusions in the relaxed state.) Remove shoes and loosen clothing. (Tense people often forget these obvious details.)

When is the best time to practise? You should practise once daily

(twice if possible), at the same time each day, at any time *except* bedtime. This will allow you to observe a "before-and-after" effect. Only if you are using relaxation as a treatment for insomnia should you practise just before bedtime or in bed.

What physical position should I adopt? Sitting in a comfortable armchair with a head rest is preferred; however, if this is unavailable a bed or a rug can be used. A chair is best, except in cases of insomnia, because you are not trying to induce sleep.

How tightly do I have to tense my muscles during the tensing phase? Just enough that you can feel the difference between the tense and the untensed states. This may be fairly tight at first, but it lessens with practice. Eventually you may simply be able to imagine that you are tensing your muscles.

Problems to anticipate

Most problems are the fault of the physician, not the patient. Take time to deal with these problems as they arise.

Failure to practise regularly

It is inevitable that the patient will miss practice occasionally. However, if practice is truly sporadic it is unrealistic to expect much benefit. Arrange for follow-up visits. This will encourage the patient to practise regularly. Record baseline measures before the first session begins. Initial effects may be subtle and are best monitored with a simple scale (e.g., mild, moderate and severe). A brief questionnaire for the patient to fill out at each visit will serve as a record of progress.

Short attention span

For patients too restless to tolerate a 20-minute session, this simple procedure will help. Begin by having the patient practise only the first few minutes of the tape, then increase the amount of time (no more than 5 additional minutes per session in one week) until the entire tape is tolerated. Explain that the ability to concentrate requires time and practice.

"Plateau" effect

There may be dramatic benefit during the first 10 to 20 days, followed by a "plateauing", disappointment and then noncompliance. The tape acts as a powerful attention-placebo, and the patient experiences a "honeymoon" effect. You must anticipate this and warn the patient before it occurs.

Other disabilities

If there is pain or other disability in a particular body part the exercises pertaining to that part must be omitted (e.g., patients with chronic back pain should not be given the "back-arching" exercise).

Type A personality

Some patients may try to perform the relaxation while watching television or even while driving a car. The attempt to do two things at once is characteristic of the "type A" personality.[20] Explain that the therapy cannot be effective if they are practising it while being distracted.

Numbness and tingling

The patient may be frightened by feelings of numbness and tingling during practice. Assuming these sensations don't occur at any other time, they are normal and merely indicate deep relaxation.

Abuse of the procedure

Patients often simply don't hear you tell them that the relaxation is to be used daily. Headache patients will use the tape only when a headache has begun; anxious patients may defer its use until the anxiety is at its zenith. In these cases it is necessary to reiterate the principles of the therapy.

Extending the techniques into the real world

Patients may report that relaxation "works" only while they are

actually using the tape. However, if they extend the relaxation period to include the "dead time" on the tape, eventually they will learn that they can remain relaxed without the instructions. After some weeks of this, encourage them to sit in a chair and "get relaxed" as best they can before turning on the tape. Then choose specific but relatively nonstressful periods during the day for them to try a few of the "tensing–letting go" procedures. Later introduce the procedure into progressively more anxiety-laden situations. Patients can use segments of the therapy routine to help them relax while in these situations (e.g., tensing and relaxing abdominal muscles or toes and feet during a business meeting). In this, as in the entire therapy program, the focus is on progressing from easier to more difficult tasks.

Conclusions

Our clinical experience has been largely positive and correlates with scientific reports on the usefulness of relaxation therapy. Those of our patients who use this therapy according to the guidelines presented here not only have a reduction in their clinical problems but also become more self-confident owing to the self-treatment aspect.

The process of teaching relaxation and following it up has additional nonspecific benefits. It acts as a concrete reminder of the importance of the doctor–patient relationship. This relationship could be enhanced by the physician's simply spending more time with the patient, but relaxation therapy offers an additional advantage — the physician is spending time employing a useful, safe technique.

Many of the physicians who have referred their patients to us have been impressed by the results of relaxation therapy, but few have taken the opportunity to learn the procedure themselves. We are confident that learning and putting into practice these techniques will enhance the satisfaction of practice for family physicians.

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