## Relaxation exercises for people with headaches

Muscle tension is a common finding in all headache disorders, including migraine and tension-type headache. Relaxation exercises have been shown to be helpful in reducing headache burdens in many people. What follows is one approach to the art of relaxation, concentrating on training the muscles to relax.

Paradoxically, relaxation is not a passive process. It is no use simply telling yourself to relax: you won't! You must practice the art of 'switching off' your muscles. This is a voluntary action, as deliberate as turning off a light switch, and can be practised until it can be done at will and done rapidly.

Start by setting aside 10 minutes each morning and night to go through these exercises. It is very helpful to have someone to help you in the early stages; we'll call them your 'assistant'. A well-motivated assistant can be of enormous value in ensuring that the exercises are performed conscientiously, and that relaxation is practised until it becomes complete.

Before you begin, try these simple tests:

- 1. Sit in a chair and lean back. Ask your assistant to lift your arm in the air in a comfortable position as though it were resting on the side of an arm chair. Take your time and relax completely. Then ask your assistant to take away their hands which have been supporting your arm. When the supporting hands are taken away, what does your arm do? If it falls lifelessly downwards, you are indeed relaxed. If it stays in the air, or you move it slowly downwards, you are not relaxed.
- 2. Lie on a bed or couch with your head on a pillow and try to relax completely. When you think that you have achieved this, ask your assistant to pull the pillow away from under your head. Does your head drop limply onto the bed? Or does it stay poised in mid-air, as though the pillow was still there? If you are still holding your head in air above an invisible pillow, your muscles are contracting without you realising it.

## The sequence of relaxation exercises

Find a quiet warm place where you won't be disturbed. Choose a time of day when you do not feel pressured to do anything else. Lie down on a firm surface such as a carpeted floor, or a bed with a firm mattress. A pillow can be used to support the head at first, but may be discarded later as relaxation becomes easier. For the first few sessions only, wear a short-sleeved shirt and shorts/skirt so that you can see as well as feel your muscles.

Lie on your back with your legs slightly apart and your arms comfortably flexed at the elbow, so that the elbows are by your sides, with your hands resting on your body. Various muscles will be contracted and relaxed in turn.

Legs. Contract your leg muscles so that your legs become rigid pillars. You will see the muscle bellies stand out as the muscles contract. Concentrate on the sensation of the muscles contracting, and the feeling of tension in them. Then, suddenly and deliberately, 'switch off' so that the muscles become limp. Concentrate on whether any sensation is coming from the muscles now. Are they completely relaxed? At this point it is helpful for your assistant to put his/her hands behind your knees and lift them up sharply to see if the leg is completely floppy, and that your muscles do not contract again as soon as the limb is moved. If they do, repeat the sequence of contraction and relaxation until they do not.

Arms. Brace your arms so that your elbows are forced downwards on the couch (or the assistant's hand if s/he is checking the degree of relaxation). Hold your arms rigidly for a moment, then suddenly stop the contraction so that your arms become limp and lifeless. Your assistant should then be able to bounce your elbows up and down without any resistance being offered. Repeat this sequence until you are aware of the sensation of muscle contraction and are able to contrast it with the feeling of relaxation.

**Neck.** Lift your head from the pillow and then allow it to drop backwards. Your assistant can provide resistance by pressing on your forehead until you feel the contraction of the muscles in the front of your neck. When you drop your head backwards, your assistant can rock it gently to and fro to make certain that there is no residual activity in the muscles. Then push the head backwards into the pillow, and register the sensation of contraction of the muscles in the back of your neck. Stop this contraction suddenly so that your head can be rotated freely by your assistant. Repeat this until relaxation is satisfactory.

**Forehead.** Frown upwards so that your brow is furrowed. If you find this difficult, look upwards as far as your eyes will move, and your forehead will become creased. Again, feel the sensation of tension in the muscles, then close your eyes and let your forehead muscles relax. Your assistant can detect the presence or absence of contraction by seeing whether the skin of your forehead moves freely under their hand.

**Eyes.** Screw your eyes up tightly and become aware of the sensation of tension, then relax the muscles and lie with your eyes closed tightly. Make sure that there is no trembling or flickering of the closed eyelids, and that your eye muscles feel entirely relaxed.

Jaws. Clench your jaw firmly and concentrate on feeling the sense of tightness in your temples as well as in the jaw itself. Then switch off, and let your jaw fall open. Push your jaw open (against pressure from your assistant's hand, if you wish), then relax completely. Move your jaw sideways to the right as far as it will go, and experience the sensation which this gives to the jaw and temple before relaxing. Then do the same to the left. Complete the sequence by clenching your jaw firmly again, and then letting it drop open loosely. Your assistant should then be able to hold the tip of your jaw with his/her fingers, and waggle it up and down rapidly without any opposition from the jaw muscles.

Whole body relaxation. Once you are able to relax your legs, arms, neck, forehead, eye and jaw muscles in order, lie for five minutes with all your muscles relaxed. Once you have achieved total relaxation, the process becomes negative rather than positive; in other words, you permit natural relaxation to continue, rather than willing yourself to relax actively. At this stage, it is helpful to conjure up a calm, peaceful image in your mind, for example a tropical beach scene, or clouds floating across the sky on a warm summer's day. Imagine the sound of surf breaking gently against the shore, or the rippling of a trout stream and the sighing of wind in the trees. Choose your own theme and your own mental picture, and live in that scene for a few minutes. As you do so, let a sensation of heaviness creep over your legs, trunk and arms, then spread to your neck and head, eyes and face. Lie completely inert, with all your muscles relaxed, a feeling of heaviness throughout the body and a pleasant scene pictured in your mind, and feel the resulting sensation of freedom in your mind and in your head.

## Incorporating relaxation into everyday life

Keep practising! There is no point in performing this exercise routine religiously for a week, and then giving up. If you do, muscle tension will reassert itself. You will need to practice the exercises daily for three or four weeks, by which stage most people have learned how to relax completely, and at will.

The final and most important step is to carry the art of relaxation into everyday life. Watch the way that you stand, sit, or talk on the phone; the way that you talk to people, write, type, or perform any other activity of a typical day. Check that all the muscles which are not essential to the task of the moment are in a state of relaxation. You will perform more efficiently if you tackle problems in an orderly fashion, without excessive and useless muscle contraction. If you notice warning sensations of tension in your scalp, jaw, or neck muscles, pause for a moment to ensure that these muscles are 'switched off' in the manner you have practiced. If you only have a short time to turn off your tension or anxiety, try twisting your neck around each way as far as it is comfortable, and then relaxing; or fully tensing your shoulder and back muscles for a few seconds, then relaxing. You can handle any situation, irrespective of the degree of mental stress, without physical tension once you become accustomed to the idea.

Finally, apply the technique to the management of your headaches. People who practice relaxation exercises regularly generally experience fewer headaches, and find those that they do get are more bearable; and when you feel a headache coming on, use these exercises to reduce any associated muscle tension.

Feedback on these exercises is always welcome. Please write to Dr Weatherall at the hospital where you saw him.

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