

EFFECTS OF RELAXATION THERAPY IN MANAGEMENT OF MUSCULAR CONTRACTION HEADACHE IN EXECUTIVES

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SUMMARY

Five executives suffering from muscular contractions (tension) headache were treated by deep muscular relaxation therapy. Individual sessions were supplemented by practice of relaxation at home, brief relaxation, and cue relaxation during office hours.

The effect of therapy, was assessed, by comparing the baseline, pretreatment individual assessment of their behavioral state and self report, with the similar assessment done during and after the successful completion of therapy. The advantages of such an individual assessment & self report in the management of muscular contraction headache are discussed.

Muscular contraction headache, that is the tension headache, results from sustained contraction of muscles about the head and neck. The extreme variability of this type of pain in the head is dependent upon a host of inter-dependent psychosocial factors. The amount of tension, fatigue, irritability and emotional exhaustion felt by the patient may render him quite incapable of handling his usual day-to-day problems and facing social situation. Such a kind of headache has commonly been noticed in today's so called executive class.

Muscle contraction patient's respond to a diversity of behavioural intervention procedures (Bakel *et al.*, 1981). It is assumed that some individuals react to stress with sustained contraction of the muscles of the head and neck which may lead to a muscle-contraction headache. At times such headaches may be under the control of environmental contingencies such as social attention or avoidance of unpleasant activities. Behavioural intervention has primarily been aimed at decreasing general physiological arousal and muscle tension levels in the head and neck region.

Results from various controlled group studies suggest that Behavioural treatment such as Relaxation therapy and EMG

feed back may be effective in reducing headache activity (Thatchir *et al.*, 1979). We have evaluated the effectivity of relaxation therapy in executives having tension headaches.

METHOD AND MATERIAL

The patients taken for therapy felt over-powered by the situations in their break-neck schedule. The work required dealing with sudden novel problems requiring quick decisions. They were constantly under a great stress trying to keep the balance between the irritability produced in the office and the needs and responsibilities of their family life. Many a time they felt disorganized and so remarked it, "I felt so emotionally exhausted and pushed to an extreme that a slight more stress would have tipped the balance towards a point of no return".

All the five patients were referred for behaviour therapy from the out-patient of Psychiatry department, All India Institute of Medical Sciences, New Delhi. They formed a homogeneous group.

PROCEDURE

All the patients were seen individually. On the first visit they were interviewed and asked to observe the nature of head-

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che carefully. They were given charts to record the frequency and intensity of the headache daily for six days. Charts were timed from 8.00 A. M. to 10.00 P.M. with 2 hours interval. Patients had to rate the intensity of headache at each of these time intervals. The rating was done as following :

1. No headache.
2. Very low level of headache, which could disappear when attention was diverted.
3. Headache which did not significantly impair concentration.
4. Headache with mild impairment in concentration.
5. Headache with moderate to severe impairment during performance of a task requiring intense concentration.
6. Incapacitating headache.

BASE LINE DATA

The pattern of all the five patients showed an interesting though not an uncommon phenomenon, that they experienced tension during office hours. Drugs had not been helpful for these individuals and they were told to discontinue all medication during this treatment. Graph I shows the pattern of headache during the pre-treatment phase. Since all the patients had shown a similar trend, an average of all the 5 patients is shown.

TREATMENT :

All the patients were individually trained in Jacobson's deep muscular Relaxation therapy (Jacobson, 1938). In a week, three sessions on alternate days were given and when the patients could do these exercises on their own, they were called to the clinic once in a week. They were asked to perform relaxation exercises at home prior to going to the office and on their return in the evening. During their weekly appointment, relaxation exercises were performed in the

presence and supervision of the therapist the problems encountered in the continuance of treatment at home discussed. They maintained a daily record of any headache and the response to relaxation therapy.

A month later, they were taught brief relaxation which could easily be performed while sitting on a chair. This was restricted to few muscle groups namely forehead, eye-brows, eyes, jaw muscles, neck muscles and breathing exercises. They performed this in the office once during the forenoon at about 11.00 A.M., during lunch hour and at 3.30 P.M. They were encouraged to explore their life-style and the relationship between headache and the oncoming event. They put it into practice by performing brief relaxation prior to situations like meetings and decision taking. A daily record of the headache, if any was kept and the response to an immediate relaxation therapy noticed.

Following relaxation therapy, their favoured music was played on the cassette recorder for 5 minutes. They were trained to recall this music whenever they had to face any stressful situation. This serves as cue-relaxation (Epstein *et al.*, 1974).

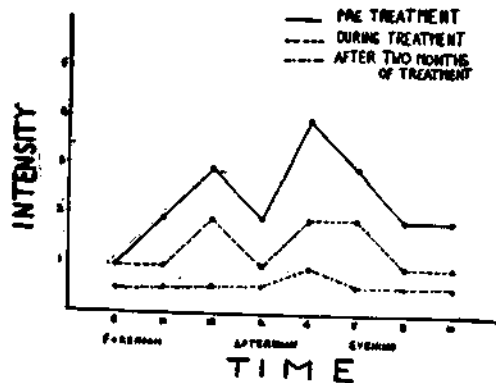
RESULTS

The therapeutic value of this treatment regime was obtained by self-report and the change from the pre-treatment baseline to the post treatment evaluations.

Graph I shows the frequency and intensity of headache at pre treatment stage, during treatment and at the post treatment stage. The graph shows that with relaxation therapy headache decreases gradually.

SUBJECTIVE REPORT :

With relaxation therapy patients reported an overall improvement in their



GRAPH 1 Intensity of headache at pretreatment, during treatment and at the termination of treatment.

lives. According to them there was a definite relief in the feeling of tension. There was no heaviness of the head which earlier was persistent all through the day. In the office they could think clearly and did not get mentally fatigued so readily. The family and social life became much more enjoyable which offered them a state of stability.

DISCUSSION

The effects of various forms of relaxation training on self report and physiological measures has bridged a gap between psychological and physical medicines. Benson (1974); Philips (1977); Reinking & Kohl (1975) found relaxation therapy effective in muscle contraction headaches and the effects persist beyond the end of training sessions. Similar response was seen in our patients also. A six month follow up of these patients did not show any relapse.

All these five patients who were ambitious, found marked improvement with relaxation therapy. Before the onset of the therapy, these patients had noted the headache becoming worse as the day progressed and they could not concentrate on their work. As the relaxation therapy progressed, gradually the patients

could feel its impact on their work efficiency. They could discuss and argue over the official tasks with relative ease.

The self observations when they note down their headache, helps to observe the sensation, thoughts and feelings which precede and accompany their headache attacks. This also helps in patients realizing that they are active collaborators in their own treatment process. Home practice has been indicated as an important determinant of therapeutic success in several case studies (Tasto & Hinkle, 1973); Warner & Lance, 1975). Home practice increases the generalization of the clinic based treatment. Moreover it helps in bringing continuity in the sessions after a gap of 6 days.

Brief relaxation exercises and imagination of favourable music during office hours has been very effective Connov (1974) has also reported the effect of brief relaxation on autonomic responses to anxiety evoking stimuli. Epstein *et al.* (1974) has demonstrated the effectiveness of combining the techniques of muscles relaxation with music and the use of taped instructions for achieving relaxation at home.

Drugs were not found useful in these cases as they felt drowsy, and had poor concentration. With relaxation therapy a feeling of confidence was an added advantage, as the patients felt they could control the headache themselves without any drugs or the doctor.

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