Journal of Traumatic Stress, Vol. 5, No. 1, 1992

Amitriptyline for PTSD in a Torture Survivor: A Case Study

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[Accepted March 7, 1991]

The present study investigated the effect of amitriptyline on PTSD symptoms in a torture survivor 7 years after the trauma. After a pretreatment assessment period of 1 month, amitriptyline 150 mg nocte was started and assessments were carried out up to 8 months. An overall improvement of 70% was noted 6 weeks after the start of treatment. Improvement was most marked in depression, anxiety, and in social and work adjustment but less so in PTSD symptoms. Residual symptoms included nightmares, constricted affect, aggressive urges, startle response, and phobic avoidance. The drug effect was partial and likely to disappear on discontinuation. The limitations of drug treatment indicate the need for combined psychotherapy for lasting improvement. Evidence so far suggests that behavioral approach in the treatment of traumatic stress symptoms achieves more stable improvement.

KEY WORDS: amitriptyline; torture; post-traumatic stress disorder.

INTRODUCTION

Despite the widespread practice of torture in many countries and a serious need of help for thousands of torture survivors, systematic treatment studies of post-torture distress do not exist. The little we know about pharmacotherapy for posttraumatic stress disorder (PTSD) largely stems from uncontrolled studies on Vietnam war veterans with chronic PTSD. Although encouraging results have been obtained with some psychotropic drugs, how generalizable they are to PTSD secondary to other types of

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0894-9867/92/0100-0077$06.50/0

trauma such as organized violence and torture remains to be seen. Because most case studies have used global ratings of outcome, they tell little about the effect of drugs on specific symptoms.

The purpose of this case study was to examine (a) the efficacy of amitriptyline in torture-related PTSD and (b) the pattern of improvement in specific symptoms. Tricyclics are widely used for chronic PTSD but amitriptyline is said to be particularly effective (van der Kolk, 1987, p. 78). The following case study is the first on torture survivors and it is also unusual in its prospective formal measures of change during treatment with amitriptyline.

CASE HISTORY

A 29-year-old man presented with severe insomnia, memory and concentration difficulties, difficulty in learning, general anxiety, dysphoria, and somatic symptoms such as pressure in the head, dry mouth, headaches, and indigestion. These complaints dated back 4 years to 1984, soon after his release following 6 months of detention and severe torture and 3 years of imprisonment in a middle-eastern country. Although he was arrested many times, this was not because he was militantly political but because he was living in a youth hostel which was raided by the police frequently and the residents of which were arrested quite indiscriminately. Fearing rearrest and further torture, he left the country for the U.K where he was granted political asylum.

His symptoms involved nightmares with a recurrent theme, recollections of lying in the dark, being dragged on the floor and of a baton being inserted into his anus. Symptoms worsened when he was reminded of the past and he avoided dark places and certain activities such as handling electrical appliances when they were plugged in or changing light bulbs. He had markedly decreased interest in work and social activities, feelings of incapacity, difficulty in attending work, poor performance at his postgraduate studies, insomnia, and poor memory and concentration. Bouts of irritability and anger seriously impaired his interpersonal relationships. He was involved in physical fights twice in the last 9 months. He had no history of behavioral disturbance prior to his imprisonment and torture. He could neither cry nor feel happiness. He also had dysphoria, anorexia, weight loss, worry about current problems, fear of losing control and harming somebody, and various somatic complaints. There was no evidence of past or present psychosis.

ASSESSMENT AND TREATMENT

He was assessed using a modified Jackson Structured Interview (Keane *et al.,* 1985) which included a post-traumatic stress disorder checklist (PTSD-CL) based on DSM-IIIR. The patient met the DSM-IIIR criteria and major depressive episode.

Clinical examination revealed no abnormality or torture-related physical signs. CT scan was normal.

The patient refused psychological treatment and was therefore started on medication. Informed consent was obtained after the procedure had been fully explained. He had two baseline assessments separated by 1 month. At 1 month amitriptyline was begun in a dose increasing to 150 mg nocte in ten days and remained on this for 8 months. No drug-free assessment could be made because the patient refused to come off medication, fearing a return of his symptoms. Serum drug levels were not assessed but tablet counts were kept to ensure compliance with drug regime. Assessments after start of medication were made at weeks 2, 6, 8, and 32.

The therapist and the patient were of the same nationality so there was no need for an interpreter. The patient was also fluent in English so the self-rating scales did not have to be translated into the patient's native language. The same researcher carried out the study from beginning to the end. No psychotherapeutic intervention was made during the trial; the patient was seen for an hour each time for assessment and renewal of prescription. No noteworthy life event occurred during the trial to affect the patient's condition.

Measures were Hamilton Depression (HDR) (Hamilton, 1969), Hamilton Anxiety (HAS) (Hamilton, 1959), PTSD-CL (PTSD symptomatology, items rated 0-4 for severity, modified from Jackson Structured Interview — Keane *et al.,* 1985), PTSD Rating scale (PTSD-RS: 33 five-point items, modified from The Mississippi Scale for Combat-related PTSD — Keane *et al.,* 1988), Beck Depression Inventory (BDI) (Beck, *et al.,* 1961, Life Areas Satisfaction Questionnaire) (LASQ — Keane *et al.,* 1989 — measuring marital, financial, psychological, social, and vocational satisfaction).

RESULTS

No change in the patient's symptoms was noted at the second pretreatment assessment one month after the first (Fig. 1).

HDR and HAS scores improved by 30%-40% within 2 weeks of starting amitriptyline. Improvement in depressive symptoms was maximum

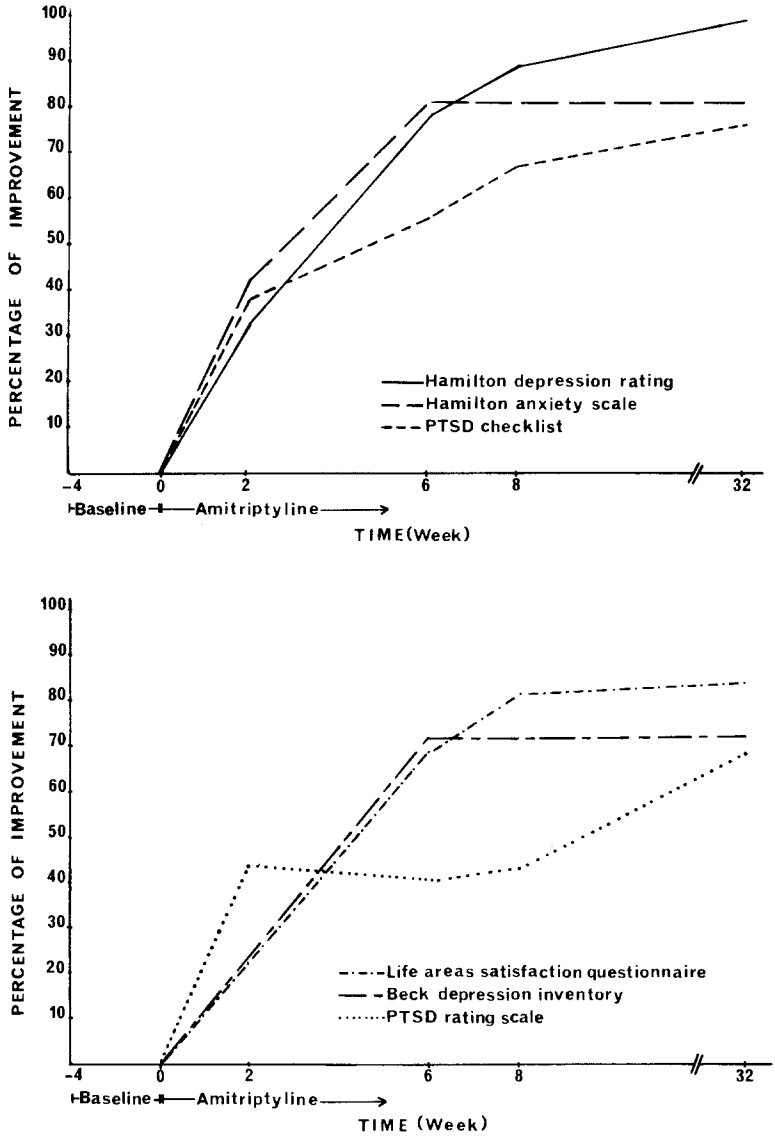

Fig. 1. Percentage of improvement in outcome measures.

within 8 weeks of treatment (HDR 89%, HAS 81%, BDI 72%).

The therapist-rated PTSD-CL showed similar improvement in anxiety and depression items. The self-rated PTSD checklist (PTSD-RS) showed less improvement (43% by 8 weeks of treatment). There were mild to

moderate residual frightening daydreams, occasional nightmares, emotional constriction, guilt over things he did in prison, anhedonia, feeling uneasy in crowds, aggressive impulses, irritability, poor concentration and memory, and startling. Startle to sudden noises had worsened slightly. The most marked improvement was in social adjustment (82% within 8 weeks of treatment), in leisure activities, family and work adjustment.

Six months after the start of treatment, the patient discontinued medication for 2 weeks (failing to renew his prescription) and had a return of sleep disturbance, night terrors and nocturnal panics. He had never had night panics in the past. These symptoms disappeared quickly when amitriptyline was resumed.

Eight months after the start of medication overall improvement was maintained with further gains in PTSD-RS scores (68%). Frightening daydreams and nightmares had disappeared. Aggressive impulses, irritability, and emotional constriction had diminished further. Other residual symptoms included uneasiness in crowds, mild anhedonia, feeling guilty about past behavior in prison, mild concentration difficulty, worsening of symptoms when reminded of the trauma, startling. Unchanged throughout treatment was moderate avoidance of dark places, which reminded him of being dragged to the torture chamber.

DISCUSSION

This result with amitriptyline is consistent with other reports of antidepressants helping PTSD (Burstein, 1984; Boehnlein *et al.,* 1985; Falcon *et al.,* 1985). The drug effect was maximum within 6 weeks for anxiety and depression. Improvement in "core" PTSD symptoms however was less marked and took longer to reach a maximum (68% after 8 months). It is difficult to explain though why startle worsened on 8 months of medication.

It should be noted, however, that the drug effect was partial and palliative rather than curative. Despite marked behavioral improvement in most hyperarousal symptoms, some residual symptoms persisted. Nevertheless, amitriptyline seems to be a reasonable choice in patients who prefer medication rather than psychotherapy. Its sedative effects may improve patient compliance by improving depression and anxiety and make the patient more amenable to psychotherapeutic interventions.

An important disadvantage of antidepressants in the treatment of other anxiety disorders is the high rate of relapse on discontinuation (Marks, 1987, Chap. 16). The return of symptoms in our patient during the brief lapse in medication at 6 months is consistent with this. How long medication needs to continue is unknown. Perhaps antidepressants need

to be combined with psychological treatment to achieve lasting improvement. Residual symptoms may have been more effectively dealt with by behavioral and anxiety management techniques. Imaginal exposure to traumatic memories have promise in relieving PTSD symptoms in survivors of torture and other massive trauma (Basoglu and Marks, 1988; Basoglu, 1991). There is now evidence to suggest that exposure-based treatments are effective in treating PTSD related to other types of trauma (Keane *et al.,* 1989; Boudewyns and Hyer, 1990) and this might also apply to torture-induced psychological problems. There is in fact some preliminary evidence to show that imaginal exposure achieves lasting improvement in torture survivors (Yüksel, 1989). Controlled trials are needed to confirm the efficacy of drug and behavioral treatments and to study their interactions.

To date there are no controlled treatment studies on torture survivors. Such studies are often regarded as "medicalizing" the torture problem and also deemed unethical. Systematic torture is no doubt a political phenomenon but it also has medical and psychiatric consequences which need attention. Ethical problems can easily be circumvented by using research designs that do not require leaving patients untreated (e.g., drug-psychotherapy combinations and cross-over designs) Furthermore, such studies need not be conducted on tortured asylum-seekers who may need urgent attention; there are many chronic sufferers in need of psychiatric care among refugee populations living in host countries. The present study, although limited in being based on one case, may nevertheless serve to illustrate a systematic approach to treatment outcome evaluation in torture survivors.

REFERENCES

Basoglu, M., and Marks, I. M. (1988). Torture. *Br. Med. J.* 297: 1423-1424.

Basoglu, M. (1991). Cognitive-behavioral approach in the treatment of torture-related psychological problems. In Basoglu, M. (ed.), *Torture and Its Consequences: Current Treatment Approaches,* Cambridge University Press, in press.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., and Erbaugh, J. (1961). An inventory for measuring depression. *Arch. Gen. Psychiatry* 4: 561-571.

Boehnlein, J. K., Kinzie, J. D., Ben, R., and Fleck, J. (1985). One year follow-up study of post traumatic stress disorder among survivors of Cambodian concentration camps. *Am. J. Psychiatry* 142: 956-959.

Boudewyns, P. A., and Hyer, L. (1990). Physiological response to combat veterans and preliminary treatment outcome in Vietnam veteran PTSD patients treatment with direct therapeutic exposure. *Behav. Ter.* 21: 63-87.

Burstein, A. (1984). Treatment of post-traumatic stress disorder with imipramine. *Psychosom.* 25: 681-686.

Falcon, S., Ryan, C., Chamberlain, K., and Curtis, G. (1985). Tricyclics; possible treatment for post-traumatic stress disorder. *J. Clin. Psychiatry* 46: 385-389.

Hamilton, M. (1959). The assessment of anxiety states by ratings. *Brit. J. Med. Psychol.* 32: 50-55.

Hamilton, M. (1969). Standardized assessment and recording of depressive symptoms. *Psychiat. Neurol. Neurochir.* 72: 201-205.

Keane, T. M., Scott, W. O., Chavoya, G. A., Lamparski, D. M., and Fairbank, J. A. (1985). Social Support in Vietnam veterans with post-traumatic stress disorder: A comparative analysis. *J. Consult. Clin. Psychol.* 53: 95-102.

Keane, T. M., Caddell, J. M., and Taylor, K. L. (1988). The Mississippi Scale for Combat-Related PTSD: Three studies in reliability and validity. *J. Consult. Clin. Psychol.* 56: 85-90.

Keane, T. M., and Fairbank, J. A., Caddell, J. M.,a nd Zimering, R. T. (1989). Impolsive (flooding therapy reduces symptoms of PTSD in Vietnam combat veterans). *Behav. Ther.* 20: 245-2360.

Marks, I. M. (1987). *Fears, Phobias and Rituals,* Oxford University Press, New York.

van der Kolk, B. A., and Greenberg, M. S. (1987). The psychobiology of the trauma response: Hyperarousal, constriction, and addition to traumatic re-exposure. In *Psychological Trauma,* van der Kolk, B. A. (ed.), American Psychiatric Press, Washington, DC.

Yüksel, S. (1989). Nature and treatment of post-traumatic stress disorder in torture survivors, Paper presented at the 2nd International Conference on Health, Political Repression, Human Rights, San Jose, Costa Rica, 27th Nov.-2nd Dec.