Guidelines for psychiatric care of torture survivors

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"I had terrible nightmares of the war every night until I came to the clinic and got treatment and medicine. Now they have stopped."

49-year-old Bosnian male

Review of the evidence for best psychiatric care of torture survivors

In describing the best psychiatric practices for the treatment of torture survivors, it is necessary to provide background on the various syndromes the survivors suffer and their corresponding neurobiology. There are also well known clinical aspects of these conditions and unique social and cultural considerations of survivors who usually come from very different cultures than the clinicians treating them. This will be briefly discussed in this section.

Syndromes among torture victims

A great deal of epidemiological data, both in countries of origin and in the United States, has indicated a high degree of psychopathology among torture victims and refugees.[1] A recent study of 1,134 Somali and Oromo refugees in Minnesota found a high torture prevalence (25 to 69%, depending on ethnicity and gender).[2] Using the Post-Traumatic Stress Disorder (PTSD) checklist (PCL-C), the authors found suspected PTSD in 25% of those exposed to torture. Clearly, PTSD has been found to be the most common diagnosis, though the prevalence varies from study to study. However, the diagnosis in epidemiological studies rarely translates to those which will be found in a clinical setting. The barriers to see a psychiatrist for many refugees is quite high. Patients often only come after coercion from family, or with severe social or physical problems, or at the urging of their immigration attorney. This means that the diagnosis one sees from studies may not be reflected in the clinical data. A recent study of 239 Bosnian and Somali patients found approximately 65% had PTSD and 60% had Major Depressive Disorder. In about 80%, the two conditions combined. Additionally, the study found that about 12% had major psychosis, including schizophrenia.[3] These diagnoses are of course a psychiatrist's summarization of various symptoms patients give and may not reflect the real concerns of the patient. Usually patients present with pain syndromes, very poor sleep, nightmares, and agitation. Best practice requires screening all torture survivors for PTSD, depression and psychotic symptoms. This is done in a

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face-to-face interview at intake and includes simple questions about mood, appetite, sleep, nightmares, irritability and auditory hallucinations.

Symptoms of anxiety and panic attacks are frequent but are often accompanied or associated with PTSD and depression. Permanent personality change by a traumatic event, as listed in ICD-9, does occur and patients who are extremely impacted may present with severe social withdrawal, avoidant behavior, and paranoia. In aging populations of traumatized refugees, patients may present with signs of dementia, reflected in being unable to maintain their own daily living, agitation at night, wandering away from home, and requiring a great deal of family service. This also needs to be evaluated and handled by a psychiatrist.

Neurobiology of PTSD and Depression

PTSD and Depression can be manifestations of central nervous system (brain) dysfunction (for review, see chapter by Southwick & Friedman, 2001[4]). The stress response of the hypothalamic pituitary adrenal axis is a normal response. However, under prolonged stress there can be serious consequences for health. It can cause plasticity in the brain and systemic hormones to produce structural as well as functional changes. Under extreme conditions, permanent damage may occur, not only through adrenal steroids but local tissue may be involved.[5] There are changes in neurotransmitters involving hyperactivity of the adrenal pituitary axis, autonomic reactivity and differences in brain structure and functions, which has been well documented.[6] This may be mediated through the amygdala. With the normal fear response, there may be a failure of other networks to regulate amygdala activity, resulting in the hyperactivity that is seen in many PTSD patients. Cortisol levels have been found to be reduced in some PTSD patients but recent work was not able to replicate these findings.[7] The hyperarousal response of the autonomic nervous system likely reflects epinephrine hyperactivity in the locus coeruleus area.[8] Others have found a reduced size of the hippocampus which corresponds to lowered recent memory and working memory for PTSD patients. This has led to a search for treatments for PTSD which would be directed at the brain disorders. Paroxetine (Paxil), for example, has been approved for the treatment of PTSD.9 After 10 weeks it was found that many of the PTSD symptoms and physiological reactivity measures did improve.

Unique Aspects Related to Treatment of Posttraumatic Stress Disorder and Depression in Refugees

There are several unique aspects to traumatized patients. First of all, most conditions are chronic. The nightmares, depression, and avoidant behavior will last for years. This has been studied among Cambodians in California where the symptoms were shown to be chronic decades after the Pol Pot regime.[10] A study of treated Cambodians indicated that a large percentage have chronic symptoms with ten or more years of treatment. Some of these symptoms are less problematic, (e.g., ongoing avoidance) but in others the full syndrome of PTSD may persist.[11]

Remissions and exacerbations are a second major feature of traumatized individuals. Any traumatic event can reactivate the full spectrum of PTSD. For example, a patient population of Vietnamese, Cambodians, Bosnians, and Somalis experienced almost complete reactivation of symptoms following observing on T.V. the attacks on the Twin Towers on 9/11.[12] The implication from this is that these patients need long-term care. Periods of remission, or improved function-

ing, does not mean it cannot reoccur. These patients may need ongoing treatment for the exacerbation of symptoms. Medication and support can ameliorate the effects of the exacerbation.

A third area of concern is regarding ethnopsychopharmacology,[13] which indicates that there are ethnic differences in the metabolism of various medications. This is true at a group level; however, the individual differences within groups are much greater than the means of the group. Therefore, one cannot take a group as a whole and determine what level of medication a patient will need. Individual variation is too great and trial and error become part of finding the correct dosage.

Social and Cultural Aspects of Psychiatric Medication

Many patients, especially from developing countries, come with little knowledge or information about psychiatric disorders and are even afraid that seeing a psychiatrist implies that they are "crazy." It takes a great deal of individual, family and community education to overcome these barriers. In addition, psychiatric treatment may be viewed as similar to antibiotic treatment – that is, short-term treatment and the disease is eliminated. A study of antidepressant compliance using blood levels found very high rates of no detectable medicine in their blood, i.e. not taking any medicine.[14] This did improve, as did their symptoms, with education. Maintenance treatment is not understood or followed for many with psychiatric conditions. Providers cannot assume that the medication is taken as prescribed and repeated education is often needed. Providers must ask about medicine use and side effects (absence of side effects probably means subtherapeutic dose). The most useful approach in addition to education is having patients bring their medicine bottles to each appointment and pills can be counted.

Specific Psychiatric Medication Information

Evidence-based medical practice has become a standard for evaluating treatment outcomes in medicine. This implies using rigid controlled studies to compare various treatment methods to determine which is most effective. There has been a great deal of criticism of the application of such studies for psychiatry on the basis of lack of criteria for diagnosis, individual differences in the patients, and the underlying assumptions on treatment methodologies.[15-18] The criticisms are somewhat irrelevant since there are no scientific, rigorous studies of comprehensive rehabilitation programs for torture survivors. One study which did evaluate treatment outcomes found no difference.[19] This study did not use medication which may indicate the lack of efficacy in treatment without a psychotropic drug. A recent review summarized treatments for PTSD among refugees and asylum-seekers.[20] Ten randomized-controlled studies were reported but no treatments were firmly supported. These randomized-controlled studies (efficacy studies) rarely are confirmed or translated in actual practice (effectiveness studies).[21] Reasons for this are complicated but clearly a study of refugees and asylum-seekers that only looks at PTSD and not depression or other medical disorders is very limited. In addition, only two of the studies used medication.[20]

Despite the lack of rigorous controlled studies in the torture treatment population, there is considerable data on treatment of PTSD, depression and psychosis in civilian and veteran populations. In addition, there is other e-based information available besides evidence-based. That is, experience-based and expert-based practices. Our clinic has

treated traumatized refugees for 33 years and our clinicians have accumulated considerable experience and expertise in the psychiatric treatment of torture survivors. Therefore, this review will focus on information from non-torture studies as well as our own long-term experiences. Currently we have 1,200 refugee patients, half of which have experienced torture, under our psychiatric care.

Before reviewing specific treatment guidelines, it should be emphasized that medication treatment does not exist in isolation. It occurs in the context of a complete psychiatric evaluation and an ongoing psychotherapeutic relationship which meets the psychological, social, legal, medical, and spiritual needs of the patients. Also, only guidelines can be given since specific treatment depends upon the patient's special symptoms, medical history, previous response, tolerance of side effects, and all the factors physicians consider in prescribing a medication.

Many of the medications that treat PTSD also treat depression, which is fortunate due to their frequent co-morbidity. Paroxetine, a selective serotonin reuptake inhibitor (SSRI), has been approved for this, though there is no reason to think it is any better than other SSRIs. It has a distinct disadvantage in the high rate of sexual dysfunction that patients experience as a side-effect, which even modest patients complain about. Other newer antidepressants, such as Effexor, have problems such as getting people off the medication due to withdrawal symptoms.

Clinical practitioners have found that fluoxetine (Prozac) and citalopram (Celexa) are two easily tolerated medications, given once a day. Fluoxetine has the advantage of a long half-life and a patient can miss a day or two without any recurrence of symptoms. This is not true of the other SSRIs. They are not particularly sedative and for patients under 65 who have trouble sleeping, anecdotal evidence has found the tricyclic medications the most useful. The cheapest one (a month's supply available for $8 at local pharmacies) is doxepin, which greatly aids sleep and is a powerful antidepressant. It has side-effects of drowsiness and constipation. It also has been worrisome for some because hoarding several months supply then taken at once could result in death. Imipramine, which some clinicians consider a slightly superior antidepressant, is more expensive. A dosage of 50-100 mg is usually adequate. However, patients from diverse ethnic groups are taking 200 mg without any side-effects and with a noticeable improvement in sleep and depression.

The alpha-adrenergic blocking agents clonidine and prazosin are extremely helpful for the nightmares and some of the agitation. These agents tone down the nor-epinephrine effect in the central nervous system that has been used for high blood-pressure treatment and are very effective in stopping nightmares.[8,22-25] These medications are routinely prescribed by providers at our torture treatment center with reports of 45-50% of patients seen taking medication. A related medication, doxazosin, has recently been found to be helpful in posttraumatic stress disorder.[26]

Anecdotally, it is usual to start patients immediately on an antidepressant such as fuoxetine in the morning and clonidine 0.2-0.4 mg hs. If sleep is a huge problem, clinicians may prescribe a medicine such as doxepin 50-100 mg at night in addition to clonidine. Nightmares are usually reduced and sleep is increased within one or two weeks.

A continual problem among many patients is irritability and hyperarousal which

contributes to interpersonal stress and may result in agitation and sometimes violence. Low doses of the atypical antipsychotics like Risperdal have been used to decrease irritability.[27] In a recent study, about 46% of patients were getting an antipsychotic medication and less than half had psychosis, the remaining received it for symptoms of agitation.[3]

People who have been traumatized can also have psychosis. The effect of auditory hallucinations and bizarre behavior is disruptive for the individual, family and the community. This may be related to severe torture but, in many cases, it is an effect of a large population – i.e. about 1% will have schizophrenia in any population. The atypical antipsychotic medications vary in their usefulness. Patients have responded to atypical medications such as Seroquel and Abilify. Many failures have been reported with these medications and so therefore we see the use the older ones, such as Perphenazine, in moderately high doses (32-64 mg).

With an aging population in some refugee groups, there is an increase in the number of people presenting with dementia, usually managed with a great deal of difficulty for their family. They often will wander at night, erratically get irritable, and may be unable to maintain some of their own daily activities. One of the first symptoms to address is to help them sleep at night. Low doses of antipsychotic medicine have been used, recognizing some of the difficulties of these medicines, to help them get a good night's sleep and allow the family to rest. Agitation may also be decreased with the use of medication. Risperdal 3-4 mg has often been helpful. Seroquel, which is more sedative, has been needed as well. Perphenazine 8-32 mg at night is a typical dose. Recently, a study has found that prazosin has treated the behavioral symptoms of agitation and aggression in patients with Alzheimer's disease.[28] We have used it with several demented torture survivors and found it very helpful. There is now evidence of increased rates of dementia in U.S. Veterans with PTSD.[29] We are now seeing increasing dementia among older tortured patients.

Pain is often a common complaint and some people have genuine symptoms of arthritis. It is tempting to use a narcotic, but experience has shown this is unwise. Ibuprofen and Naproxen, both non-steroid anti-inflammatory agents, have controlled such symptoms. The main side-effect has been stomach upset which may need to be addressed with omeprazole (Prilosec).

Studies have found a high rate of hypertension and diabetes among patients.[30] This is alarmingly so and represents a huge public health problem of increased heart disease, strokes and other complications of these two diseases. New patients who do not have a regular physician are strongly recommended to get blood pressure measurements at admission and periodically. Rate of hypertension in patients is 45%, about three times the national average for age group. Rate of diabetes is about 17%, which is also much higher than the national American average.[30] It leads to the problem of what to do with people who do not have regular medical care and cannot afford medication. Clearly the conditions are best treated by an internist or a family physician. Patients have not always had these doctors available for reasons of no insurance, language barriers, or long waiting lists at community clinics. Procedures are to routinely do blood pressure measures at the first visit and periodically thereafter if there is no other physician involved. If there is a risk of diabetes in obesity, age, or family history, clinicians can do a fasting glucose or Hem A_{1C} which is easier to do since it does not require fasting. If it is necessary to begin

Table 1. *Guidelines for Psychiatric Care for Torture Survivors.*

	Article	Type of Service
Syndromes among Torture Victims		
1	Steel Z, Chey T, Silove D, Marnane C, Bryant RA, van Ommeren M. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. JAMA 2009;302(5):537-49.	Best
Neurobiology of PTSD and Depression		
2	Bisson JI. Pharmacological treatment to prevent and treat posttraumaticstress disorder. Torture 2008;18(2):104-6.	Emerging
3	Boehnlein JK, Kinzie JD. Pharmacologic reduction of CNS noradrenergicactivity in PTSD: the case for clonidine and prazosin. J Psychiatr Pract 2007;13(2):72-8.	Best
Social and Cultural Aspects of Psychiatric Medication		
4	Kinzie JD, Leung P, Boehnlein JK, Fleck J. Antidepressant blood levels in Southeast Asians: clinical and cultural implications. J Nerv Ment Dis 1987;175:480-5.	Promising
Specific Psychiatric Medication Information		
5	Boynton L, Bentley J, Strachan E, Barbato A, Raskind M. Preliminary findings concerning the use of prazosin for the treatment of posttraumatic nightmares in a refugee population. J Psychiatr Pract 2009;15(6):454-9.	Best
6	De Jong J, Wauben P, Huijbrechts I, Oolders H, Haffmans J. Doxazosin treatment for posttraumatic stress disorder. J Clin Psychopharmacol 2010;30(1):84-5.	Promising
7	Foley KF, Quigley DI. Pharmacogenomic potential of psychiatric medications and CYP2D6. MLO Med Lab Obs 2010;42(1):32-4.	Emerging
8	Kinzie JD, Riley C, McFarland B, Hayes M, Boehnlein J, Leung P, Adams G. High prevalence rates of diabetes and hypertension among refugee psychiatric patients. J Nerv Ment Dis 2008;196(2):108-12.	Promising
9	Kinzie JD, Sack RL, Riley CM. The polysomnographic effects of clonidine on sleep disorders in posttraumatic stress disorder: a pilot study with Cambodian patients. J Nerv Ment Dis 1994;182(10):585-7.	Best
10	Laika B, Leucht S, Heres S, Steimer W. Intermediate metabolizer: increased side effects in psychoactive drug therapy. The key to cost-effectiveness of pretreatment CYP2D6 screening? Pharmacogenomics J 2009;9(6):395-403.	Emerging
11	Loovers HM, van der Weide J. Implementation of CYP2D6 genotyping in psychiatry. Expert Opin Drug Metab Toxicol 2009;5(9):1065-77.	Emerging
12	Ramey-Hartung B, El-Mallakh RS, Reynolds KK. Pharmacogenetic testing in schizophrenia and posttraumatic stress disorder. Clin Lab Med 2008;28(4):627-43.	Emerging
13	Wang LY, Shofer JB, Rohde K, Hart KL, Hoff DJ, McFall YH, Raskind MA, Peskind ER. Prazosin for the treatment of behavioral symptoms in patients with Alzheimer disease with agitation and agression. Am J Geriatr Psychiatry 2009;17(9):744-51.	Promising
14	Wexler R, Feldman D. Initiation of therapy for patients with essential hypertension or comorbid conditions. Prim Care 2006;33(4):887-901.	Promising
Summary		
15	Kinzie JD. Combined psychosocial and pharmacological treatment of traumatized refugees. In: Wilson JP, So-kum Tang C, editors. Cross-Cultural Assessment of Psychological Trauma and PTSD. New York: Springer; 2007. p. 359-69.	Best

treatment for hypertension the guidelines for initiation of therapy for essential hypertension are very helpful.[31] There are specific indications for use of diuretics, β blockers, and ACE-I medications. The standard of care for diabetes has been well described by the American Diabetic Association.[32]

Related to the probable ethnic differences in metabolizing medication,[13] new methods of pharmacogenetics testing may make it possible in the future to analyze prior to treatment the major metabolizing enzymes such as P-450 2D6, which could give the dose of an antidepressant or antipsychotic that a patient would need.[33,34] This in theory would avoid the lengthy trial and error method psychiatrists now use. There are problems associated with this, such as co-medicines use and diet[35,36] as well as expense, which places this in the emerging practice category which may be part of standard care in the future.

Summary

Refugees and asylum seekers who are torture survivors have a high risk of psychiatric disorders. A great deal is known about the biology of these disorders and their treatments. Psychotropic medications can provide rapid improvement in symptoms and therefore need to be initiated early in treatment.
All survivors who have positive symptoms should have a full psychiatric evaluation including current history, past psychosocial history, medical history, mental status examination, and a 5-axis diagnosis. Psychiatric care can be successfully combined with psychotherapy and social support.[37] Trauma related symptoms may be chronic and require long-term care, but the health and quality of life is greatly improved with the appropriate use of psychiatric medications.

There is very strong evidence that associated depression of torture victims may be effectively treated by antidepressant medication. There is good evidence that nightmares and sleep disturbance may be relieved by adrenergic blocking agents, such as clonidine and prazosin. There is some evidence that low doses of an antipsychotic medication, such as risperidone, helps agitation and irritability. There is no evidence that medication can help avoidance and numbing symptoms or prevent exacerbations of symptoms after new trauma. The promising and emerging psychiatric practices are listed in Table 1 on the previous page.

Learning Points

Many refugees who have been tortured have major psychiatric disorders including depression, PTSD, and psychosis.

These disorders cause changes in the central nervous system and can be successfully treated by appropriate medicine in the therapy.

These disorders are subject to remissions and exacerbations and medical treatment needs to begin early to provide immediate relief and continue long term.

Highly Recommended Readings

- Boehnlein JK, Kinzie JD. Pharmacologic reduction of CNS noradrenergicm activity in PTSD: the case for clonidine and prazosin. J Psychiat Pract 2007;13(2): 72-78.
- Kinzie JD. Combined psychosocial and pharmacological treatment of traumatized refugees. In: Wilson JP, So-kum Tang C, editors. Cross-Cultural Assessment of Psychological Trauma and PTSD. New York: Springer; 2007. p. 359-69.
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The Inge Genefke and Bent Sørensen Anti-Torture Support Foundation

The foundation was established by the OAK Foundation in 2002 as a non-profit foundation:

1. to support work against torture
2. in particularly to support travel that is associated with the work against torture
3. every even year to honor a person, which has carried out particularly commendable work against torture with the Inge Genefke award of 10.000 euro.

Everybody can apply for a grant from the foundation. Send an application to the manager Bent Sørensen at bs@atsf.dk. The time for decision is normally less than one week.

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