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Chronic Pain in Survivors of Torture

Given the complexity of the health and social consequences of torture, refugee trauma, and a life in exile, pain is only one of many problems to be addressed in survivors of torture. Most specialized rehabilitation centers and programs have therefore adopted multidisciplinary approaches, linking traditional rehabilitation principles to the legal and political aspects of torture, including medico-legal documentation, torture prevention, and advocacy.

Several models of care have developed, and there is considerable variation not only in the organization of care delivery, but also clinical practice in different centers and regions. Some centers apply a medical approach in assessment and treatment, prioritizing medical and physical aspects in rehabilitation, whereas others are more oriented toward psychosocial needs and treatment models.^{1,2} Very few torture survivors have access to specialist pain services.³

Among the multitude of problems presented by torture survivors referred for treatment, persistent pain in the musculoskeletal system is recognized as one of the most frequent physical complaints.^{4,5,6,7,8} Despite the established value of multidisciplinary rehabilitation there is little consensus on how pain and pain-related disability should be addressed. In what often seems a reaction to traditional investigative and diagnostic biomedical approaches, and in the face of manifest distress, pain has often been assumed to be predominantly the presentation of psychological disturbance such as chronic post-traumatic stress disorder or other trauma-related problems, depression, or chronic anxiety. Overemphasizing the importance of psychological problems may result in insufficient recognition of the value of medical assessment and in failure to recognize and treat physical pain.⁹

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The Infliction of Pain and Suffering

Torture methods are usually somewhat arbitrarily divided into physical and psychological methods, but in most cases the victim is exposed to a combination of forms of torture—physical as well as psychological.

Psychological methods often include induced exhaustion and debility through food, water, and sleep deprivation, isolation, and monopolization of perception, such as through movement restriction and high-pitched sound. In many cases, victims and their families are threatened with death, and victims may experience mock executions or witness or are forced to participate in the torture and maltreatment of other prisoners or family members.^{4,8}

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What Does Pain Hurt?

Physical torture is in most instances directed towards the musculoskeletal system, aiming at producing soft tissue lesions and pain and usually at leaving no visible or nonspecific findings after the acute stage. Random beatings, systematic beating of specific body parts (the head, palms, soles, and lumbar region), strapping/binding, suspension by the extremities, forced positions for extended periods, and electrical torture are frequent. Other physical methods include asphyxiation, near-drowning, stabbing, cutting, burning, and sexual assaults including hetero- and homosexual rape.^{4,8}

National and regional variations in torture practices are reported, including geographical differences in the use of specific torture methods.^{4,10} Such knowledge is of value in documenting alleged torture and adds to the validity of the statement.

The Clinical Picture

Torture survivors often develop symptoms of major depression, generalized anxiety, and traumatic stress.^{9,11,12} Other frequent mental reactions are cognitive disturbances with impaired memory and loss of concentration, irritability, sleep disturbances, nightmares, and a negative sense of self, characterized by shame, feelings of guilt, and loss of self-esteem.¹⁷ However, there are concerns about the applicability of standard diagnostic categories to people from cultures that do not share the Western individualization of psychological and social problems. Some have questioned the appropriateness of locating post-torture problems entirely within individuals who have often been the deliberate target of systematic destructive efforts over a prolonged period because of their membership of a particular ethnic, religious, political, or other social group.¹³

Torture survivors often develop symptoms of major depression, generalized anxiety, and traumatic stress

Pain in the musculoskeletal system is the dominant physical symptom in the chronic phase. The clinical picture is one of regional or widespread muscle pain, joint pain, pain related to the spine and pelvic girdle, and neurological complaints, mainly irradiating pain in the extremities and sensory disturbances. Visceral symptoms (cardiovascular, respiratory, intestinal, and urogenital complaints) and headache are also prevalent.^{5,6,8,10,14,15} Only a few systematic studies have addressed the association between specific long-term physical sequelae and the use of identified torture methods. Associations have been described between exposure to falanga (beating of the soles) and pain in the lower legs and feet and impairment of walking; between severe beating of the head and headaches; between suspension from the upper extremities and pain in the shoulder girdle and reduced shoulder function; and between sexual assaults and low back or pelvic pain and urogenital symptoms.^{5,8,15,16}

Reported objective findings in the late phases are likewise related to the musculoskeletal system.^{4,6,14,15} They tend to be nonspecific and cannot, on their own, provide incontrovertible evidence of exposure to torture. Typical findings include increased muscle tone; tender and trigger points in postural muscles; tendonitis, tenderness and restricted range of movement in peripheral joints and the cervical and lumbar spine;

and tenderness in the soles and compensatory altered gait pattern.^{4,15,17} At neurological examination, sensory disturbances are predominant.^{5,14} Fractures related to alleged physical torture are reported with a prevalence ranging from 4% to 27%, with limb and rib fractures being predominant.^{4,18,19} Various types of spinal fractures and other lesions including lesions of intervertebral disks and disk herniation are likewise reported, but systematic imaging studies are lacking.

Pain Mechanisms Involved in Chronic Post-torture Pain

The concepts of pain syndromes evolving over time, predicted by the severity, extent, and repetition of the original trauma, may apply to post-torture pain syndromes, but the etiology and pathogenesis of chronic pain in torture victims are incompletely understood and inadequately studied.

Musculoskeletal Nociceptive Pain

Most of the published literature on long-term musculoskeletal consequences of torture is descriptive, listing symptoms or clusters of symptoms without diagnoses, so the etiology and pathogenesis of the persistent musculoskeletal complaints including pain are not known.

The identification of torture survivors in the clinical setting relies mainly on the clinician

Pain elicited from peripheral nociceptors may be caused by: (1) permanent injury to specific components of the musculoskeletal system inflicted by the torture, for instance, lesion of the shoulder joints after suspension by the upper extremities, lesion of the knee joints after direct blows or forced prolonged knee-loading positions, or lesion of plantar structures after falanga and/or (2) strain in the musculoskeletal system secondary to overload and disuse due, for instance, to joint dysfunction and compensatory altered movement patterns.

Neuropathic Pain

Nerve lesions caused by blows, strangulation, traction, and other forces are probably common in torture survivors, and neuropathic pain caused by peripheral nerve lesions is therefore a likely pain mechanism. Neuropathic pain in torture survivors has been described in relation to the use of specific torture methods:^{14,15,20-23} peripheral neuropathy of the feet after exposure to falanga; neuropathic pain due to partial lesion of the brachial plexus after suspension by the upper extremities; partial lesion of the lumbosacral plexus after suspension by the lower extremities; segmental, radiating neuralgic pain after forced, back-loading positions; trigeminal neuralgia related to head trauma; and peripheral neuropathy after tight handcuffing, shackling, or binding of wrists or ankles. Development of chronic pain syndromes after exposure to electrical torture has also been described and related to lesions in the central nervous system.¹⁴

Altered Central Pain Modulation (Central Sensitization)

Several chronic muscular pain syndromes have been described in which changes in spinal and supraspinal pain-modulating mechanisms are thought to be important. These

syndromes share common characteristics, not unlike the constellation of symptoms found in many torture survivors: regional or generalized musculoskeletal pain, often associated with poor sleep, fatigue, sensory disturbances, headache, and visceral symptoms, and variously diagnosed in other settings as chronic widespread pain, fibromyalgia, and chronic fatigue syndrome.

Health professionals must therefore pay special attention to gaining their patients' confidence

An apparent discrepancy between the much-reported subjective pain complaints and scarcity of objective findings in survivors of torture, combined with relative unfamiliarity with chronic pain mechanisms among health care professionals, has led to the common conceptualization of pain in torture survivors within a psychosomatic framework, even in the presence of scars and medical findings consistent with the torture history. Better sense may be made of this type of pain by reference to changes in pain signaling in the central nervous system rather than to absence of pathology in peripheral tissue structures and organs.^{24,25}

Psychological Mechanisms

During the last decade, a consistent relationship has been found between certain beliefs, biases, and behaviors, in particular between catastrophizing and fearful processing of internal and external information and avoidance of normal levels of activity. Further, guarded movement or resting and sparing of the limbs and spine have serious consequences for physical health and social integration, contributing to the development and maintenance of persistent musculoskeletal pain disorders after injury.²⁶

Torture aims to destroy the victim as a human being through the systematic infliction of severe pain, brutalization, and psychological suffering

Torture aims to destroy the victim as a human being through the systematic infliction of severe pain, brutalization, and psychological suffering. The development or maintenance of pain problems and responses to treatment may be substantially influenced by survivors' beliefs and fears about pain, including appraisals of its significance, habitual ways of dealing with it, and interpretation of the meaning attached to the experience of torture, which can range from guilt at surviving or a sense of being irretrievably damaged, to pride in courage and resistance. Refugees seeking and granted asylum in Western countries are usually dealing with dislocation from family, community, work, social networks, culture, language, and the familiar structures of their society. Survivors may also fear for their safety or that of family members in their country of origin; they may struggle to gain access to legal, health, education, and welfare services and may find themselves the objects of suspicion and racist abuse in their host country, all of which may compromise their adjustment.²⁷ Detention of refugees

seeking asylum, increasingly common in the United Kingdom, Australia, and elsewhere, has clear, severe, incremental adverse effects on mental health.²⁸ The higher rate of mental distress compared to the general population is not surprising, but it goes beyond the constellation of symptoms labeled as post-traumatic stress disorder (PTSD).^{9,12,29}

Symptoms of PTSD and chronic pain share some characteristics, particularly anxiety and attentional bias toward somatic cues, as well as avoidance of provoking cues. Additionally, preliminary data suggest that stress responses and pain modulation may be dysregulated in both conditions³⁰; more research is warranted into similar cognitive, behavioral, and physiological response patterns in PTSD and chronic pain³¹. Clinicians need to be aware of the possibilities of interacting systems when they opt to focus only on pain, and treatment studies are urgently required that measure both PTSD and pain adequately.

Identification of Torture Survivors in the Clinical Setting and Special Considerations

The obligation for health professionals to know about torture, including its methods, consequences, and possibilities for rehabilitation, has been described in various declarations, notably the Tokyo Declaration of 1975, the Position Statement on Nurses and Torture of 1989, and the Declaration for Physiotherapists of 1995. Even so, research has shown that the traumatic background of torture survivors is often missed by health care providers in public health care.³²

Procedures that can remind the torture survivor about the torture may provoke marked anxiety and should be carefully explained

The identification of torture survivors in the clinical setting relies mainly on the clinician. Torture survivors are frequently reluctant to disclose their traumatic experience, convinced that nobody will believe their story. The health professional may hesitate to ask because of uncertainty about the torture survivor's reaction or for other reasons. This situation, where both the health professional and the torture survivor are silent about the trauma, usually results in lack of understanding and failure to make sense of the patient's presentation. This situation leaves the torture survivor isolated and uncertain of the appropriateness of treatment based on partial understanding. It is therefore imperative, when good contact has been established, not least through proper use of trained interpreters (not family members or untrained health care personnel), to ask directly about a prior history of exposure to physical or psychological assaults, including the use of specific torture methods. The disclosure is often a relief for the patient and is taken as a sign that he or she is likely to be believed and treated with concern.

Special considerations are necessary in the assessment and treatment of torture survivors, whose suspicion of other people may also be directed at health professionals; some survivors have experienced the involvement of officials such as prison doctors in the torture situation.⁴ Health professionals must therefore pay special attention to gaining their patients' confidence.

Procedures that can remind the torture survivor about the torture, such as those involving electrical equipment or scans performed in closed tubes, may provoke marked anxiety and should be carefully explained. However, in most instances these examinations can be completed. Flashbacks are intrusive memories that result in re-experiencing a traumatic event from the past, so that the individual for a time partly or totally loses contact with present reality. Flashbacks in torture survivors can be provoked by events or situations that remind them of the torture experiences, such as medical equipment, uniformed staff, unforeseen waiting time, and waking from unconsciousness (e.g., anesthesia). Every effort should be made to avoid flashbacks by establishing a calm atmosphere, explaining planned procedures in detail, obtaining fully informed consent, and maximizing the patient's control of timing of procedures.

Every culture has its own way of understanding and communicating illness and suffering, and interpreters are therefore often needed in work with survivors of torture, not only to translate the language, but also as cultural guides. Neutrality and professional confidentiality are fundamental principles in using interpreters, and this should be made explicit to the torture survivor. The use of interpreters with a history of trauma similar to that of the client in question should be avoided, and professional interpreters should be used.

Assessment and Documentation

Clinical assessment can be used to document findings consistent with allegation of torture or to plan treatment and rehabilitation. In documenting torture, the focus will be on the description of symptoms and signs that provide evidence to support the account of torture. Expert documentation of torture is well established in medical work against torture; international guidelines on assessment of torture survivors for medicolegal purposes are described in the *Manual on the Effective Investigation and Documentation of Torture and other Cruel, Inhuman or Degrading Treatment or Punishment* (the Istanbul Protocol), drafted in 1999.³³

Every culture has its own way of understanding and communicating illness and suffering, and interpreters are therefore often needed in work with survivors of torture, not only to translate the language, but also as cultural guides

When assessment is for the purpose of treatment or rehabilitation, the aim is to identify targets for intervention that may produce maximum improvement. A standard pain assessment including a thorough examination of the musculoskeletal system and neurological evaluation should be part of the overall assessment of the torture survivor in order to: (1) identify factors, including psychosocial factors, that may affect pain perception and pain-related behavior as well as functional impairment; (2) identify lesions in the locomotor system caused by the torture; and (3) identify pain-generating mechanisms.

Assessment of the locomotor system in torture survivors is time-consuming. Most survivors have been exposed to several

different types of physical torture; at the time of examination they complain of multiple and widespread pains and physical impairments, necessitating examination of most musculoskeletal structures. Knowledge about common torture methods and their potential trauma mechanisms is therefore a prerequisite for a systematic and effective examination.

The pain history is essential and should contain the following specific information:

What torture methods were applied. This information helps the physician to ascertain possible damage to the musculoskeletal and peripheral nervous system and assess potential pain mechanisms. However, it is common for survivors to describe periods of unconsciousness as a result of torture, so they

Torture survivors are frequently reluctant to disclose their traumatic experience, convinced that nobody will believe their story

are not necessarily able to give a full account; they also suffer problems with memory, and they may omit details they find particularly humiliating or shameful. The health professional is unlikely to obtain a complete account of torture inflicted.

Onset of the pain in relation to torture exposure. Most torture survivors attribute the start of pain to the torture, and describe pain that has continued, albeit usually with varying intensity. Some torture survivors state that immediately after torture they had severe pain, which declined over months, only to reappear suddenly at high intensity and with a different quality. We know little of the development of pain mechanisms under such circumstances.

Pain quality can be a difficult part of the pain history to obtain, especially through an interpreter. The interpreter should be carefully instructed to translate the pain description as thoroughly as possible using the patient's own words, but there is a risk that nuances are lost in translation. In addition, we cannot assume that pain description crosses cultures, since it often uses metaphor and analogy.²⁵

Beliefs about pain, its origins and its implications, and about damage done, are important areas of questioning. In many cultures it is assumed that pain is a sign of ongoing damage or deterioration, and an explanation of mechanisms of chronic pain in the absence of such damage is valuable. This explanation provides a basis to reframe pessimistic beliefs about the possibilities of better function and to discuss changes in behavior that will encourage rehabilitation.

Treatment and Management of Pain

Chronic pain treatment trials have not yet grouped patients or attempted treatment matching by trauma history, and there are no systematic studies addressing treatment and outcome of treatment in torture survivors with chronic pain. This shortcoming is unfortunate because such research could significantly advance theory development and improve treatment efficacy.

Clinically, failure to appreciate the intricacies of the relationship between trauma-related problems and chronic pain tends to result in poor clinical decision-making and inadequate therapeutic intervention. Pain treatment is often neglected in this population, and the problem is all too often reframed in

psychological terms by health professionals unfamiliar with pain diagnosis and treatment. At worst, the torture survivor complaining of pain from physical torture is left feeling disbelieved, fearing untreated damage and the prospect of steady worsening, which lessens any chance of a therapeutic relationship and agreement on treatment.

Evidence-based clinical guidelines for the assessment and management of pain and pain-related disability in torture survivors, emphasizing biomedical, physical, psychosocial, and behavioral aspects, should be developed and integrated into multidisciplinary rehabilitation efforts. As in mainstream pain care, an interdisciplinary approach to pain management is optimal, with a focus on agreed goals of improved understanding, function, and participation. It is often difficult for torture survivors to accept that chronic pain inflicted by torture is a permanent condition for which there is no technical or pharmacological cure and to understand that realistic treatment goals are reduction but not elimination of pain, as well as improvement in functioning through physical, practical, and psychological skills development. It is therefore essential, before treatment begins, to address torture survivors' expectations.

Treatment modalities in the interdisciplinary pain management may include:

- 1) Education in pain mechanisms, physiology, and psychological aspects of pain.
- 2) Psychological interventions targeting cognitive and behavioral aspects of adaptation to pain.
- 3) Physiotherapy with the principal goal of enhancing overall physical functioning and reducing musculoskeletal impairment caused by the torture.
- 4) Pharmacological treatment to minimize symptoms and problems associated with pain.

Adherence to medical treatment is often low, and accurate information—especially about expected side effects—is therefore essential

Pharmacological treatment is often neglected in the management of chronic post-torture pain, and currently there are no systematic studies in this population to suggest variation from best practice. As in other chronic pain conditions, pharmacological treatment should be based on a thorough pain assessment and identification of pain mechanisms involved. Adherence to medical treatment is often low, and accurate information—especially about expected side effects—is therefore essential. Particular attention should be paid to the possibility that torture survivors have been forcibly medicated in the past.

Implications for Future Research

Knowledge about chronic post-torture pain is incomplete in all areas. Research in chronic post-torture pain should therefore be clinically relevant, aiming at identifying relationships between pain and a number of clinical, functional, and psychosocial factors, as well as theoretical, focusing on pain etiology and development of effective assessment methods.

To manage pain more effectively as part of the overall rehabilitation of torture survivors, increased knowledge on the following aspects is needed:

1. The magnitude, character and cross-cultural aspects of chronic pain in torture populations, including the natural history of pain and cultural beliefs about the meaning of pain.
2. Pain mechanisms underlying chronic pain conditions

Health care professions have active national and often international groupings that work toward preventing torture, and in some cases to exposing it and bringing to justice those who practice it

following torture, and their relationship to torture methods applied and specific torture-induced lesions.

3. The relation between chronic pain and the effects of prolonged stress in survivors of torture.
4. Systematic observation and data collection on outcome following pain treatment in torture populations in relation to clinical, functional, behavioral, and psychosocial factors. (Work in this area is only just developing in the field of mental health treatment of torture survivors.³⁴)

Development of assessment instruments across the various domains of torture-related pain and pain-related variables will be a prerequisite. In light of the high prevalence of pain problems among torture survivors,^{3,4} the development of such assessment methods applicable in different sociocultural groups and languages is a major need and a huge task. Without this work we cannot be certain that we are providing the most effective help, in the most accessible form, to torture survivors.

In conclusion, several issues are particularly pertinent to health care professionals. One is that professional ethics and internationally agreed commitments, if not moral repugnance, urge the extension of clinical and research skills to provide better treatment and rehabilitation for this generally neglected population. Another is that health care professions have active national and often international groupings that work toward preventing torture, and in some cases to exposing it and bringing to justice those who practice it. IASP has a special interest group (SIG) concerned with pain from torture, organized violence, and war.³⁵ Part of the work of such groups is to investigate and if necessary to bring disciplinary proceedings against members of the medical profession who aid and take part in torture. There are opportunities in the workplace for health care professionals to make contact with refugee organizations to ensure that health needs are being met, to contribute to formal and informal teaching within **their professions and** in interdisciplinary and refugee health settings, and to examine their own clinical procedures and services to ensure that they are accessible and nonthreatening to survivors of torture seeking medical treatment.

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Kirstine Amris, MD

Consultant Rheumatologist

*The Parker Institute and Clinic of Rheumatology
Frederiksberg Hospital, Copenhagen
Denmark*

Amanda C. de C. Williams, PhD, CPsychol

Reader in Clinical Health Psychology

University College London

Consultant Clinical Psychologist

Medical Foundation for Victims of Torture

London, United Kingdom

email: amanda.williams@ucl.ac.uk

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