Treatment and management of wounds and scars of torture

The incidence of a history of torture among patients presenting to UK clinicians is surprisingly high. Recognition of their traumas is important in understanding their problems, planning treatment, offering medico-legal assistance, and helping to suppress this unlawful and deplorable practice. Careful assessment of wound scars and other consequences of violent abuse is required. Although this is within the general competence of every clinician, specialists in wound healing are especially well suited to such work.

Torture is a crime in international law. Despite this, in 1999 it was known to be practised in over 132 countries, (Piwowarczyk et al, 2000), and the situation has probably worsened since then. The harm it leaves persists long after any physical injury has healed; the psychological damage can be life-long, producing occult symptoms which pose confusing diagnostic problems.

Tens, perhaps hundreds of thousands of men, women and children have sought asylum in the UK in recent decades, following violent abuse in their countries of origin. They can present to clinicians in a wide range of disciplines, from plastic surgery, through gastroenterology to psychiatry. Nurses, physiotherapists and doctors with a special interest in wound healing are particularly well placed to help them.

What is torture?
The UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1975) (untreaty.un.org/english/treatyevent2001/pdf/07e.pdf) defines torture as:

The act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed; or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. It does not include pain or suffering arising only from, inherent in, or incidental to lawful sanctions.

This description excludes acts by rebel groups (such as the Tamil Tigers in Sri Lanka, Uganda’s Koni rebels, or the FARC [Fuerzas Armadas Revolucionarias de Colombia, Revolutionary Armed Forces of Colombia] in Colombia) who, in opposing torturous regimes, all too often copy their governments’ abuses. From a legal point of view, such acts are defined as organised violence, and in the UK at least, can attract the same rights to asylum as state-sponsored torture.

Why should clinicians ‘diagnose’ torture?
Under the Geneva convention, asylum seekers who have a ‘well-founded fear’ of cruel or inhumane treatment on return to their country of origin should be granted leave to remain in a host country. It is not illegal to seek asylum. Evidence that the person has previously so suffered (usually as a medico-legal report) can strongly support a claim for ‘leave to remain’ or ‘humanitarian protection’.

Torture survivors are prone to post-traumatic stress disorder (PTSD), panic attacks and depression. Differentiating between physical and psychological causes of clinical problems can be difficult. The recognition of a history of torture can facilitate management of perplexing symptoms. Administrative detention of torture survivors by the immigration authorities can cause severe harm through retraumatisation (Arnold, 2007), and should only occur under ‘very exceptional circumstances’.

Torture can cause specific physical and psychological ailments which benefit from treatment.
The World Medical Association Declaration of Copenhagen states that ‘the absence of documenting and denouncing acts of torture may be considered as a form of tolerance thereof and of non-assistance to the victims’ (World Medical Association [WMA], 2007). Effectively, this makes it the duty of every doctor to report evidence of torture. This should also apply to other healthcare professionals, although there is probably no equally authoritative and forceful directive from nursing and other clinical bodies.

Documentation can on occasion assist in the prosecution of torturers. At a higher level, when societies make an organised effort to emerge from state or communal violence, this kind of evidence can assist in individual and social recovery. Mechanisms to expose and overcome past abuses, such as the Truth and Reconciliation Commission in South Africa after apartheid, are unfortunately unusual.

**Methods of torture and their identification**
A partial list of common methods of torture is given in Table 1. It is not definitive — the ingenuity with which our species has developed means of harming and abusing each other is remarkable and horrible. More detailed information can be found in Peel and Iacopina, 2002 and Giffard, 2000.

By the time survivors reach the UK, acute lesions have usually (but not always) healed, leaving scars and deformities as a result of the absence or poor quality of care previously available to the victims. It is often important to distinguish between lesions due to torture and those arising from ‘benign’ causes (see below).

**Cigarette burns**
These are usually circular or ovoid and approximately 0.6–1.2cm in diameter (Figure 1). They have a dark periphery and where scarring is more intense, a pale centre. Only splattered metal droplets (in metal workers) can readily be confused with them (Faller-Marquardt et al, 2008). When a long burning tip is applied tangentially to the skin, elongated scars can result; burns inflicted by rubbing out the cigarette over an area can cause mottling. Hypertrophic or keloid scarring can occur but this is unusual. Location is also important — depressed people do occasionally self-harm with cigarettes, but this is almost invariably done with the dominant hand and sustained on the opposite arm.

**Falaka or falanga**
This involves repeated and forceful beating on the soles of the feet, usually with a truncheon or the flat surface of a machete. It causes swelling, lasting for days or weeks, and is followed by persistent pain in the foot on walking. This often has characteristics similar to pressure ulcers.

**Table 1**

<table>
<thead>
<tr>
<th>Common methods of torture</th>
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<tbody>
<tr>
<td>Burns with cigarettes, heated metal, molten plastic, or caustic solutions</td>
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<tr>
<td>Beating (especially falaka) but other forms of blunt trauma, including head and spinal injuries, fractures</td>
</tr>
<tr>
<td>Laceration (usually with blades)</td>
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<tr>
<td>Crush injuries (especially to testes, fingers)</td>
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<tr>
<td>Suspension</td>
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<tr>
<td>Stress positions</td>
</tr>
<tr>
<td>Bullet wounds (usually low velocity)</td>
</tr>
<tr>
<td>Electrocution</td>
</tr>
<tr>
<td>Rape (both anal and vaginal)</td>
</tr>
<tr>
<td>Results of detention in abusive conditions</td>
</tr>
<tr>
<td>Psychological harm</td>
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</table>

The Declaration of Copenhagen (WMA, 2007) effectively makes it the duty of every doctor to report evidence of torture. This should also apply to other healthcare professionals...
to claudication — the pain comes on after a relatively fixed distance, goes off after rest, following which the patient can walk on. However, unlike arterial insufficiency, the pain is usually improved by elevation. The subdermal plantar fascia is often fragmented and tender, and dorsiflexion of the toes is painful. This has been imaged by high resolution dermal ultrasound (Gniedka and Danielsen, 1995). The plantar arch can be flattened (Skylv, 1993). Lymphatic damage with persistent brawny swelling can occur.

Blunt trauma
This is highly variable and the results depend upon the site, force applied, and object(s) used — fists, boots, batons and gun butts are common. As contusions which have not breached the epidermis heal, blunt trauma wounds frequently leave post-inflammatory hyperpigmentation (Figure 2). This condition frequently follows the contour of the blow(s) and is probably the result of over-stimulation of melanocytes by chemical signals (cytokines and thrombus degradation products) released from the haematoma. It is most commonly seen in darkly-pigmented skin. Resolution can take many years. However, blunt trauma is not the only cause of hyperpigmentation, this can also arise after allergic reactions (Peel et al, 2003).

Whipping injuries leave stripes which may (or may not) be parallel to one another.

More serious blunt injury can cause fractures, dislocations and damage to related nerves. Common injuries include:

- Fractures of the middle third of the face, with an associated, palpable step in the inferior orbital margin and blunting or loss of sensation in the distribution of the infraorbital nerve
- Fractures of the jaw with pain on chewing and/or reduction in mobility and loss of, or damage to teeth
- Cervical and lumbar spine injuries with consequent spondylosis and nerve involvement

Laceration wounds
These can be inflicted with a knife, machete or bayonet and are often part of torture in detention where medical care is often conspicuous by its absence, incompetence, or collusion with authority. Wounds which would ordinarily be sutured in the detainee’s normal life but which are broad and lack suture marks are more likely to have been inflicted where clinical care could not be accessed. Sometimes only incompetent care is available (Figure 3). Linear scars must, of course, be distinguished from tribal markings, which are usually multiple, parallel and symmetrical, and from accidental injuries. Patients who have survived more serious, penetrating wounds of the chest, abdomen or limbs may have undergone surgery via an incision which may have been through the initial cut and will usually show suture marks. Nerve, tendon or vascular wounds may be present and should be investigated.

Crush injuries
Crush injuries of fingers and toes are sometimes seen. Crushing or ligation of the scrotum is also encountered. Outcomes range from a moderate increase in testicular tenderness to disruption or even removal.
Compression of the nerves crossing the wrist from traction on or excessive tightening of handcuffs can leave lasting sensory and/or motor damage; Tinel’s sign is often positive.

Suspension
This can be by the arms or legs. A particular form with the arms hyper-extended backward is known as ‘Palestinian hanging’. It can leave striae where the skin has been abnormally stretched for an extended period, or brachial plexus damage. Victims are sometimes beaten, whipped or stabbed while being hung (Figure 4).

Blunt head trauma
This is extremely common. There may be a contused laceration scar, the result of blunt trauma to skin overlying a bony surface. There is probably little, if any, correlation between the severity of any underlying organic brain injury and the extent of scarring of the scalp. The duration of unconsciousness and the extent of pre- and post-traumatic amnesia are a better guide. Concussion may interfere with recall of events during torture. It may also be associated with grand mal epilepsy or partial seizures. A previous or family history of epilepsy should be sought. The differentiation of organic brain injury from psychological harms is extremely complex (see below).

Bullet wounds
These are most commonly sustained by torture victims during initial capture or attempted escape and may show both an entry and exit site. The latter is almost invariably larger. If there is no exit wound the bullet may have been removed. If so, there will often be evidence of surgical exploration and debridement. Shot gun injuries show numerous small round or ovoid scarring. Although pellets may have been removed or worked their way out, X-rays sometimes show retained opaque foreign bodies. Shrapnel can leave multiple, jagged, small and widely distributed scars.

Electrical torture
This rarely leaves visible scars, although occasionally there may be marks from clip electrodes or characteristic deep burns. If absolutely necessary for legal purposes, they may be visible by biopsy and special stains (Karlsmark et al, 1984) and possibly by high resolution dermal ultrasound.

Psychological damage is overwhelmingly common and severe among torture victims. The most frequent pathologies are PTSD, panic attacks and depression. PTSD is a characteristic human reaction to powerlessness in the face of life-threatening events.

Rape
Rape is frequently used as a means of torture. Fortunately (or otherwise), when women who have suffered ‘ordinary’, penile-vaginal rape are examined more than one month after the event, less than 5% show physical evidence of damage (Peel, 2004). In this event, internal examination is probably not to be recommended, as it is likely to be traumatic and will contribute nothing.

Rape victims quite frequently show distinctive human bite marks or scarring on the thighs inflicted during the violation. Anal rape more commonly produces lasting anal fissures, which are often observable by inspection alone. Again, internal examination (unless under anaesthetic for the purpose of surgical treatment) is probably unwise. A large and horrifying array of objects are sometimes used for violations.

Human immunodeficiency virus (HIV) infections and other sexually transmitted diseases are fairly common in rape survivors; the patient should, of course, be counselled for testing and/or referred to a local clinic. It is common for both men and women who have been raped to have great difficulty in revealing this fact, even when it is germane to an asylum claim. The interview should be conducted in a calm and supportive fashion (Bogner et al, 2007), and several visits may be needed.

Stress positions
These are used by torturers who seek to avoid leaving physical evidence. They were pioneered by the British army in Northern Ireland (Bygrave, 2004) and have been used by the US military in Guantanamo Bay (Okie, 2005). Being placed in a stress position causes pain without (usually) leaving any detectable physical damage. Clinical literature on the subject is scant, but it is possible that a careful examination by a physiotherapist and/or ultrasound or magnetic imaging resonance (MRI) scan might reveal ligamentous laxity, minor cartilage abnormalities or other joint problems. It would, however, be difficult to distinguish these from everyday wear and tear. However, absence of evidence is not evidence of absence.

Other causes of harm
Other harms during detention and torture can arise from the conditions in which survivors are kept, or their reaction to them. Scabies and other insect bites, and peptic ulceration (a product of stress and helicobacter infection) are common, although the epidemiology of the latter has not been documented.

In some countries there have been mass hunger strikes by abused detainees, leading to neurological, renal and other long-term complications. For further information about hunger strikes, see the draft guidelines on management produced by the UK Department of Health (DoH, 2007), but still not implemented because of delays by the Home Office (Arnold, 2008).

Psychological damage
This damage is overwhelmingly common and severe among torture victims. The most frequent pathologies are PTSD, panic attacks and depression. PTSD is a characteristic human reaction to powerlessness in
the face of life-threatening events. The syndrome is defined in the International Classification of Diseases, 10th edition (ICD-10, 2007). Cardinal features include hyper-arousal (with sleep disturbance and exaggerated startle and tendon reflexes), intrusions (memories of and flashbacks to the trigger event), and avoidance of reminders of the traumatic event and emotional numbing. Memory and concentration are frequently impaired by the syndrome and associated loss of sleep. Schizophrenia can also sometimes be seen. Differentiation between organic and psychological issues in patients who have PTSD and a history of head trauma is especially difficult, particularly when these problems are compounded by the neurological effects of hunger strikes (Wernicke’s encephalopathy) and/or electrocution applied to the head. In cases of uncertainty or for advice on treatment, an expert psychiatric or neuro-psychiatric opinion is invaluable.

**Examining torture survivors**

The process and time required depend upon the purposes of the examination. A simple routine nursing, general practice or hospital outpatient appointment is quite different from a formal psychological assessment or production of a medico-legal report for use in a claim for asylum. However, many of the principles are the same.

As the whole purpose of torture is to break or terrorise the subject, victims find it difficult and painful to reveal their histories and often fail to mention highly relevant facts. They may already have been required to do so under stressful circumstances during an asylum interview with UK authorities, and found that the experience stirred up distressing memories. Many feel shame over things done to them which they were powerless to prevent, or because they have been forced to betray colleagues. Anyone can be broken under sufficient duress.

A large proportion have no or little English, and need the assistance of interpreters. Some find this particularly problematic because of fears that what they reveal may find its way back to other members of the immigrant community or the authorities in their country of origin. Gender and cultural issues are also important as, for example, when a male doctor examines a female Muslim rape survivor.

Patients with PTSD, depression and/or a significant organic brain injury which may co-exist, often have difficulties in remembering and sequencing their experiences of torture and abuse (Cohen, 2001). It is crucial that this is understood and addressed both for diagnostic purposes and because immigration courts frequently hold that such memory problems are ‘evidence’ of dishonesty in asylum claims.

The process of examination should ideally take place in a supportive environment, allowing sufficient time, with breaks as needed or spread over several sessions. A box of tissues is essential — tears are common. The interview should include:

- An unhurried systems review to elicit current medical and psychological problems
- Medical history before the torture
- A description of the events (such as arrest) leading up to the torture, the abuses themselves, and how the person came to be released or escape

**Table 2**

<table>
<thead>
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<th>Age of wounds and scars</th>
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<tbody>
<tr>
<td>Fresh wound: 1–3 days old</td>
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<tr>
<td>Early healing: 3–10 days</td>
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<tr>
<td>Later healing: 10–21 days</td>
</tr>
<tr>
<td>Early maturing: 21–42 days</td>
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<tr>
<td>Intermediate maturing: 42–180 days</td>
</tr>
<tr>
<td>Mature: 180 days–1 year</td>
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<tr>
<td>Quiescent: &gt;1 year</td>
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It is not possible to set an upper limit on the age of a quiescent scar by any known means of examination or investigation.

**Table 3**

**Istanbul Protocol: Criteria for the attribution of lesions**

- Not consistent: the lesion could not have been caused by the trauma described
- Consistent with: the lesion could have been caused by the trauma described, but it is non-specific and there are many other possible causes
- Highly consistent: the lesion could have been caused by the trauma described, and there are few other possible causes
- Typical of: this is an appearance that is usually found with this type of trauma, but there are other possible causes
- Diagnostic of: this appearance could not have been caused in any way other than that described. ‘Ultimately, it is the overall evaluation of all lesions and not the consistency of each lesion with a particular form of torture that is important in assessing the torture story’
statement. The report should include, separate from the medical and torture histories and examination findings, a professional or expert opinion about the ways in which the clinical findings relate to the history provided by the subject.

It is also important to consider the previous pattern of healing and treatment of any injuries identified. Where the subject has multiple laceration scars, some of which they state were due to torture, and where the latter (only) are wider and do not show suture marks, that suggests that these lesions were sustained in conditions (such as detention) where medical assistance could not be obtained. Likewise, wounds that heal under insanitary conditions are more likely to have been infected. In this event, the scar will be larger than otherwise expected, and may have a ‘fuzzy’ edge.

The other feature of medico-legal opinions which clinicians with a special interest in wound healing are well suited to offer, is consideration of the age of the lesion(s). Obviously, if the person said the injury happened more than one year ago and there is a fresh wound with a scab and an erythematous margin, that would not be consistent with the history. Determination of the age of wounds by examination is an inexact science, nor is there any special investigation which is likely to be particularly informative. Some rough guidelines are set out in Table 2.

In making such a report, the clinician is required in law to put their duties of truth to the court ahead of any perceived duties or care to the patient, as set out in the Ikarian Reefer determination (Friston, 2005).

The Istanbul Protocol (Table 3) describes best practice in the attribution of scars and other lesions and harms due to torture, e.g. describing how likely it is that the subject has undergone the abuse they describe. The hierarchy of attributions is given in Table 3, but a few explanations are necessary. Because ‘consistent’ in this terminology means that there are ‘many other possible causes’, the courts have held that it would be impractical for the rapporteur to consider and discuss each of these. However, when using the terms ‘highly consistent’ or ‘typical’, it has been held that the rapporteur should explicitly analyse each of these to show how the conclusion was reached (United Kingdom Asylum and Immigration Tribunal [UKAIT] 00009, 2008). An example is given in Box 1. It may also be helpful to consider (as the Protocol requires) the overall evaluation of the available clinical evidence. Thus, the likelihood of torture in a subject who shows evidence of falaka, cigarette burns at sites which could not be self-inflicted, and damage to jaw and teeth...
which they attribute to blows from a gun butt, is greater than a person who shows only one of these.

Sometimes, authors of such reports are asked to appear to give evidence in court. This is neither as stressful nor as onerous as might be expected. It is salutary to see the mechanisms by which justice is done (or otherwise). It is also good practice to require — where possible — that the subject or their lawyer provide information about the court’s understanding of your report as set out in their decision. This is important because immigration officers and immigration judges frequently misunderstand medical evidence, resulting in numerous rejections of asylum which are subsequently determined to be well founded on appeal.

**Treatment of lesions resulting from torture**

Some of the physical results of torture and organised violence lend themselves to conventional therapy. In a distressed patient with a wide and confusing variety of problems, providing practical solutions to the simpler ones can open the door to effective care of underlying problems. The lasting pain of falaka can be improved with shoe inserts and other orthotic manoeuvres, with advice about rest and elevation (National Institute for Health and Clinical Excellence [NICE], 2005).

Back pain and sciatica from beatings should be investigated as for other forms of back pain, and treated accordingly. Non-invasive methods such as physiotherapy, graded exercises and transcutaneous electrical nerve stimulation (TENS) are often helpful. The damage of female genital mutilation can be alleviated (but not cured) surgically. Conditions such as contractures, nerve injuries, post-traumatic epilepsy, sexually transmitted diseases, malaria, and stress ulcers should be treated on their merits.

A particular problem is met in the intersection between physical and psychological causes of symptoms. Although this is true to some extent...
connection with asylum claims, and is sometimes remunerated for doing so under Legal Aid.

**Useful contact addresses**

Medical Justice Network
5 Museum House
25 Museum Street
London WC1A 1JF
www.medicaljustice.org.uk

Helen Bamber Foundation
5 Museum House
25 Museum Street
London WC1A 1JF
www.helenbamber.org

Medical Foundation for the Care of Victims of Torture
www.torturecare.org.uk/

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**References**

(All web references were last accessed 27 September, 2009)


Istanbul Protocol on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. Available online at: http://physiciansforhumanrights.org/students/hhr-ed/manual-effective-investigation.pdf


**Key points**

- Patients who have lived in parts of the world where gross human rights violations are common may well have been tortured. This history is more common in UK practice than is usually understood.

- Eliciting a history of torture can illuminate otherwise inexplicable physical and psychological symptoms. It needs to be done with gentleness and caution as the ‘re-experiencing’ can be painful.

- Ascertaining and documenting physical evidence of torture can often be beneficial to the patient, and requires attention to detail. A specialist interest in wound healing is a major asset in such work.

- To address the human rights concerns of the patient is good clinical practice.

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