Medical, physical examination in connection with torture

Section I

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In three short sections we will focus on the medical, physical examination in connection with torture and other related human rights violations.

The major content theme is divided into different organ systems that will be described with regard to the acute and somatic consequences of torture here and in the following two issues.

The examination can have two purposes: in order to treat health problems and in order to document torture allegations. But physical examination for health problems cannot stand alone. It is not possible to look at a human being as a machine and limit ourselves to detection of physical machinery problems. Examination of torture survivors must look at the person from a holistic point of view, including physical, mental and social functioning. Other facts indirectly caused by torture may be taken into consideration: Torture survival is often followed by refugee status. To be a refugee in itself has an influence on one’s health, and mental problems have somatic consequences.

When dealing with torture, the definition of the UN Convention against Torture is used.

Section I contains:
- Literature review
- Pitfalls
- Skin lesions

Literature review

In early medical work against torture, the focus was very much on the documentation of torture. In 1990, a study was published based on the medical records of the first 200 torture victims examined by the Danish Medical Group.¹ When it was discovered that so many of the torture survivors had serious health problems and were in need of treatment, the focus changed to treatment. The first Rehabilitation and Research Centre for Torture Victims was established in Copenhagen in 1982. The literature on the health-related problems of torture victims has increased since then, both concerning somatic and mental problems.

The first manual on examining torture survivors was published in 1992.² Since then three books have been published (Forrest in 2000³, Physicians for Human Rights in 2001⁴, and Peel & Iacopino in 2002⁵), and a very important and impressive desk study was carried out by Gurr and Quiroga⁶ in 1997 and 1998.

Medical documentation of torture has

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been an ongoing activity in the medical work against torture. This will be further elaborated in the relevant sections of this chapter.

A very important achievement took place in 1999 when the “Istanbul Protocol”, *Manual on the Effective Investigation and Documentation of Torture and other Cruel, Inhuman or Degrading Treatment or Punishment* was produced.

The principles are so important because they oblige the state to conduct an in-depth medical examination of torture allegations. The principles outline minimum standards for state adherence to ensure the effective documentation of torture.

According to these principles the investigating authority has the power and obligation to obtain all the information necessary to the inquiry.

When doctors write a certificate after the medical examination of a person who alleges having been tortured, it is extremely important that the doctor states the degree of consistency with the history of torture. A conclusion indicating the degree of support to the alleged history of torture should be based on a discussion of possible differential diagnoses (non-torture-related injuries – including self-inflicted injuries – and diseases).

The degree of support should be indicated as follows:

1) A high degree of support.
2) Consistent with the alleged torture, moderate degree of support.
3) Consistent with the alleged torture, slight degree of support.
4) The changes cannot support the history of torture.

In order to prevent torture, the medical profession desperately needs education in documenting torture. However, only if the legal profession is involved will it have the necessary impact to erase impunity effectively and give the victim redress, compensation and rehabilitation. The ongoing rehabilitation of torture survivors should include these areas in its work.

Different physical torture methods leave different physical sequelae. Therefore, it is a very important part of the physical examination to obtain a detailed account of the alleged torture methods to which the person has been subjected.

It is also important to take into account that mental problems can have serious health implications. Prolonged stress conditions have in many studies shown to have somatic consequences via neuro-humeral and other mechanisms.

Somatisation among refugees has been found to be associated with psychiatric symptoms and disorders, but not with objective evidence of a medical disorder. Therefore one is seldomly presented with many somatic complaints, which of course have to be investigated, but may be a sign of more psychiatric illness.

Many refugees have, prior to their flight, been imprisoned, often under very inhuman and degrading conditions, which is a serious health hazard. During imprisonment they may have contracted contagious diseases such as tuberculosis, hepatitis, etc. It lies, however, outside the scope of this chapter to cover the examination of those diseases. Likewise, we will not enter into a discussion of tropical diseases.

**Pitfalls**

As has already been highlighted at the beginning of this chapter, writing down the history is a crucial element in the medical evaluation of a refugee who alleges to have been tortured. In this connection, there are three major possible pitfalls: They do not tell you what they have been through, what they tell you
is not the truth, and lastly they may not have been aware of the time of the appearance of a non-torture-related disease, and hence they may wrongly suggest its relation to torture.

The following case story by Jakobsson very well illustrates the first possibility:

“A 20-year-old woman from a Middle Eastern country walked in the street without a veil, and with lipstick and painted nails. She was taken by the ‘chastity-police’. At the station she was raped by policemen, and her right hand was put into a meat chopper. She received surgical treatment after some time, but lost 3 fingers.

She arrived in Sweden with her right hand hidden in her sleeve, and did not show her injuries to the police, nor to the lawyer. She was refused asylum. After showing the evidence, she was granted asylum a short time after her appeal.”

This case shows that it is difficult to have one’s words taken seriously, and to show and talk about one’s injuries.

To bring persons from poor countries to rich countries is a growing business in which the “travel agent” can earn a lot of money. Of course some of the asylum seekers will be provided with instructions on what to tell the authorities, including torture allegations, in order to obtain asylum. It can indeed be difficult to prove that a person is presenting a fabricated story, in cases in which no physical sequelae can be evaluated. The situation becomes even more complicated considering that many “real” torture victims may have problems recalling the exact details of their torture, and even in therapy sessions give conflicting stories during repeated interviews.

There is no easy solution. The examiner will have to follow the guidelines already given for comparing the history of torture with the description of the acute symptoms, their development and the symptoms and signs that are present at the time of examination. On this basis, a conclusion has to be drawn concerning the degree of consistency.

Skin lesions
(by Lis Danielsen)
The significance of skin lesions is mostly related to the documentation of the history of torture. Acute lesions may lead to health problems, e.g. pain and secondary infections, including problems with healing, especially when located in an area with venous or arterial insufficiency. Scars located close to a joint may induce contracture, decreased mobility of the joint, and pain during activity. Apart from that, scars seldom inconvenience the patient, although they can sometimes be of cosmetic importance since they may be a reminder of the torture and add to the changed sense of identity induced by the torture.

A detailed history of the alleged torture and of the related symptoms it induced is important in order to evaluate the significance of the observed lesions on the skin. In cases with no or uncharacteristic lesions, a characteristic history may be the only support to the allegation of torture, as e.g. in some cases of electrical torture. Also a history of skin diseases and non-torture-related lesions is of importance.

The examination should include the entire body surface to detect signs of:

1) Skin diseases
2) Non-torture-related lesions
3) Torture-related lesions.

Torture sequelae related to the skin may be:

1) Lesions resulting from direct physical injuries.
2) The occurrence of new, or aggravation of
existent, skin diseases, provoked by physical or psychological trauma.

Acute lesions are often characteristic since they show a pattern of inflicted injuries that differs from non-inflicted injuries, e.g. by their shape and distribution on the body. Since most lesions heal within a short period of time leaving no or non-specific scars, a characteristic history of the acute lesions is important. A history of the development until healing is also of importance. Torture lesions should be described by their location, symmetry, shape, size, colour and surface (e.g. scaly, crusty, ulcerating), as well as by their demarcation and level in relation to the surrounding skin. Photography is essential whenever this is possible.

**Blunt trauma**

Blunt trauma may leave contusions or lacerations with extravasation of blood, in some cases reflecting the shape of the instrument used, e.g. from beating with a stick. Severe beating on the soles of the feet, “Falanga”, may leave contusions in the arch of the feet and swelling of the feet extending from the arch to the medial aspects of the feet and ankles. Blunt trauma often leaves no or uncharacteristic scars. Flogging or beating with canes or truncheons may, however, leave characteristic scars, e.g. asymmetric, linear, straight or curved or “tramline”-shaped scars, showing a pattern of external infliction. The scars may be hypertrophic with a narrow, regular, hyperpigmented area in the periphery, representing the inflammatory zone appearing around necrotic tissue in the acute phase (Figure 1). A differential diagnosis could be plant dermatitis, usually dominated, however, by shorter scars, with a narrow zone of hyperpigmentation in the periphery. In one case, the alleged torture was beating and scalding on the back. Symmetrical, atrophic, depigmented, linear changes typical for striae distensae were observed on the back and in both axillary regions (Figure 2). The skin changes could not support the history of tor-
tute. The patient, however, may have been unaware of the changes on the back before the torture. Prolonged application of tight ligatures may leave a linear zone extending circularly around the arm or leg, in one case with lack of hair indicating cicatricial alopecia.¹² No differential diagnosis in the form of a spontaneous skin disease exists because of the location of the scar.

**Sharp trauma**

Sharp trauma, e.g. through the use of a razor blade, knife or bayonet, gives characteristic ulcers and usually leaves recognisable scars. In some cases, self-in infliction should be considered, particularly when located on a wrist.⁷ If pepper is applied to the open wounds, the scars may become hypertrophic.¹² A differential diagnosis could be traditional healers or African ritual scar-tattoos. In one case in which the deepness of a scar, allegedly following the use of a sword, was doubted, the use of a high-frequency ultrasound could demonstrate a considerably deep scar.¹⁴ Afterwards, the patient was granted refugee status.

**Thermal injuries**

Burning with cigarettes, hot instruments or hot fluids leaves acute burns of varying degrees. Burning is the form of torture that most frequently leaves scars, often of diagnostic value. Cigarette burns often leave 5-10 mm large, circular and macular scars with a depigmented centre and a hyperpigmented, relatively indistinct periphery.¹¹ Dermatological conditions, e.g. sequelae to pustules, might be a differential diagnosis. Burning via the transfer of larger amounts of energy to the skin than those transferred when stubbing a cigarette on the skin often produces markedly atrophic scars. They present a narrow, regular, hyperpigmented or hypertrophic periphery, originating from the inflammatory zone, which surrounds the necrotic tissue in the acute phase. While their shape reflects the shape of the instrument used, their size relates to the amount of energy transferred to the skin. Following alleged torture from burning on several areas of the skin with a heated, circular metal rod the size of a cigarette, mostly circular scars with an atrophic centre and a regular, narrow, hyperpigmented or hypertrophic zone in the periphery were observed. Their diameter varied from below 1 cm to around 2 cm, and the patient had 35 scars distributed on several areas of the skin.¹² A differential diagnosis could be sequelae to abscesses, but such scars usually do not show the typical, narrow zone in the periphery.⁷ Burning material from a rubber tyre, placed above the head of a woman, running down on her head and body, left keloid changes on the central area of her chest (the medial areas of her breasts not included). The periphery of the scar was irregular and demarcated via a narrow, well-defined zone of hyperpigmentation, and its shape corresponded to damage caused by material running down the body.¹ A scar following alleged torture from burning with a glowing metal rod placed across the broad area of the calf was primarily suggested to represent changes induced by venous insufficiency. The scar was shaped like a boat, and was placed across the broad part of the calf; it had an atrophic centre and a regular, narrow zone of hyperpigmentation in the periphery (Figure 3).¹⁵ The shape of the scar thus corresponds to a lesion induced by a rod pressed against the soft calf, and the appearance of the scar corresponds to a third-degree burn because of its atrophic centre and the narrow hyperpigmented zone in its periphery. In contrast, venous insufficiency leaves indistinctly limited hyperpigmentation and scars from ulcers located distally on the lower leg (Figure 4).¹⁵ Afterwards, the patient was granted refugee status. When the nail matrix
is burnt, subsequent growth produces striped, thin, deformed nails, sometimes broken up in longitudinal segments. If the nail is also pulled off, an overgrowth of tissue may occur from the proximal nail fold. Changes caused by lichen planus may be a relevant differential diagnosis, while fungus infection is characterised by thickened, yellowish, crumbling nails, different from those mentioned above.

**Corrosive injuries**

Corrosive injuries, caused by acid thrown against a victim, caused linear scars, a few cm wide, with a depigmented centre and a regular, narrow, hyperpigmented zone in the periphery, located on the thighs and buttocks. They were arranged in an asymmetric pattern, mostly obliquely directed down the legs. They showed signs of external infliction in agreement with a liquid running down the legs, and they indicated sequels to necrotic areas as expected following a corrosive injury.

**Electrical injuries**

Electric current follows the shortest route between two electrodes through tissue with the lowest resistance, i.e. blood vessels, nerves and muscles. When using high-voltage stun weapons, the current flow cannot, however, be limited to the pathway between the electrodes. In some of the cases, electrical torture leaves acute lesions on the skin. Unlike burn lesions, these lesions usually do not reflect the shape of the instrument used, but appear in segments within the influenced areas, since the current selects areas with low resistance. Electrical torture via electrodes shaped like a knitting needle, “Picana”, leaves clusters and linear arrangements of 1-5 mm wide lesions, covered by red-brown crusts, sometimes surrounded by a 1-2 mm broad, erythematous zone with irregular and indistinct edges. Lesions in lines following a linear application of the electrodes may also be seen. The crusts probably correspond to an electrical injury and may contain deposits of metal from the electrodes. The concomitant heat development has not been sufficient to induce a regular inflammation in the periphery. A differential diagnosis may be insect bites or scratching. Well-demarcated, serpiginous lesions, measuring 1-2 cm across, with an irregular, narrow, elevated, peripheral zone and a central area containing several black spots, each measuring 1-2 mm, have been observed shortly after electrical injuries on the left side of the chest and on the left arm.

**Figure 3.** A scar shaped like a boat, placed across the calf with an atrophic centre and a narrow, regular zone of hyperpigmentation in the periphery (Danielsen, 1995). Published with kind permission from the Danish journal Sår (www.saar.dk).

**Figure 4.** Venous insufficiency with indistinctly limited hyperpigmentation distally on the lower leg (Danielsen, 1995). Published with kind permission from the Danish journal Sår (www.saar.dk).
The lesions show indication of electrical injury because of their appearance in 1-2 mm large segments and because of the involvement of blood vessels. Vasculitis or haemorrhagic herpes zoster might constitute a differential diagnosis. The location might be helpful since vasculitis is chiefly located on the lower extremities, is symmetrical, and sometimes more diffusely located, while herpes zoster is located in an area innervated by a single ganglion, and is unilateral. Clusters of round red macular scars, about 1 mm in diameter, have been observed four weeks after "Picana". Eight weeks later many of the scars had disappeared. The remaining scars were small, white or red-brown spots. Among the skin diseases leaving pigmented scars is lichen planus, leaving about 2 mm large scars. Electrical torture has been reported to induce 6-8 mm large, irregular, red-brown, keloid scars on the helix of both ears. A differential diagnosis might be a chondrodermatitis helicis, but this is usually covered by a scale and is pale and painful. Six months after the use of a 45-cm-long stun gun, delivering 150,000 V, with a screw 4 mm in diameter at its end and 12 small places where electricity is also discharged from the lower part of its side, a sharply demarcated bluish line 1 mm across, forming a complete circle 5 mm in diameter and a second mark of similar characteristics completing only two-thirds of a circle, were observed. Similar fractions of a narrow red ring appearing in segments have been seen in the days after defibrillation using 2736 V along the periphery of the pad.

Histological changes
If a victim agrees, a 3-4 mm punch biopsy in local anaesthesia, might be helpful in supporting an allegation of electrical torture. Previously, only few cases of electrical torture have been studied histologically. Only in one case, in which lesions were excised seven days after the injury, alterations in the skin diagnostic of electrical injuries were observed (deposition of calcium salts on dermal fibres in viable tissue located around necrotic tissue and on collagen fibres deep in the dermis). Lesions excised a few days after alleged electrical torture showed segmental changes and deposits of calcium salts on cellular structures consistent with the influence of an electric current, but with only a moderate degree of support. A biopsy taken one month after the alleged electrical torture showed a conical scar, 1-2 mm broad, with an increased number of fibroblasts and tightly packed, thin collagen fibres arranged parallel to the surface, consistent with electrical injury, but with only a slight degree of support.

Even if an examination does not reveal any abnormal findings, the possible use of electrical torture cannot be excluded. The use of high-frequency ultrasound may be helpful to discover the location of calcium deposits in order to select an area for biopsy.

Skin diseases
An example of a skin disease being psychologically provoked by torture may be the concomitant occurrence of an urticarial eruption. Physically provoked skin diseases may be the development of psoriasis or lichen planus in the traumatised area, as a "Koebner-reaction". However, such skin changes have little diagnostic significance in relation to torture.

References
3. Forrest DM, ed. Guidelines for examination of...