TORTURE SEQUELAE LOCATED TO THE SKIN

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Abstract. Torture sequelae and associated diagnostic problems within the field of dermatology are reported. Patient I claimed to have been subjected to torture in 1973 in South America and reported that he had a thick rubber-like rope tied around each thigh just above the knees. Six years later a linear zone of alopecia was observed extending circularly around each thigh, probably representing cicatricial alopecia. Patient 2 claimed to have been subjected to torture in November 1978 in Iraq and reported that he was burned on several areas of the skin with a metal rod of the size and shape of a cigarette. One year later, several circular or serpiginous scars with a markedly atrophic centre and a narrow hypertrophic. distinctly demarcated peripheral zone were observed on the skin. They probably represent the sequelae to deep third-degree burns produced by an electrically heated. cylindrical metal rod. Patient 3 claimed to have been subjected to torture in July and August 1974 in India. She reported to have been burned on several areas of the skin with a cigar as well as lifted by her hair. A few days after the torture she developed transient features typical of traction alopecia in the scalp, including the appearance of pimples. The examination 6 years later revealed on the extremities two irregularly shaped and indistinctly demarcated scars, one of them slightly atrophic, which might be sequelae to burns produced by an ember from a cigar.

Considerable use of different types of torture has been reported in recent years (2, 3). As torture sequelae located to the skin constitute a major part of the observations, this disease complex deserves special dermatological attention. The skin changes present many diagnostic problems within the field of dermatology, and the possibility for verification of the history of torture is often crucial to the patient, e.g., when he/she as a political refugee applies for residence permit. Furthermore, documentation is an important link in the combat against torture. The following cases are reported in order to illustrate different varieties of torture applied to the skin.

CASE REPORTS

Case 1

Patient I is a South American refugee, examined in Canada in 1979. He claimed to have been sugjected to different

types of torture in South America in 1973, some of which resulted in skin sequelae. He had a thick rubber-like rope tied around each thigh just above the knees. The ropes were pulled tighter while he was being questioned and he suffered extreme pain while the rope was being tightened over a one-hour period of time. The skin in these areas of the thighs was white and depressed following the rope tightening and has remained white ever since. Both thighs remained swollen for about one month.

Physical examination. A 10 mm wide flat, white, circular zone was observed around both thighs just above the knees (Fig. 1). The zones presented few hairs compared with the surrounding skin. Also, follicle openings appeared to be few inside these zones.

Case 2

Patient 2 is a 24-year-old man, examined in October 1979 in Denmark. He claimed to have been subjected to different types of torture in November 1978 in Iraq, some of which resulted in skin sequelae. He was burned on several areas of the skin, localized to the dorsum of the left hand, to the lower extremities and to the abdominal wall. As the patient was blindfolded, he did not see the instrument used, but he suggested it to have been of the size and shape of a cigarette and solid. The instrument was pressed against one area of the skin at a time, in periods ranging from 30 to 60 sec, approximately. Each area was used once only. The pain was most severe during the first seconds and then declined. Towards the end of the burning period, the damaged area as well as the surrounding skin became numb for a few minutes. Often, however, the patient lost consciousness during the period of burning because of the pain. The damaged areas of the skin appeared as black holes, some of which became greenish after a few days. A whitish or vellow liquid was secreted from some of the ulcers, while others showed inflammation of the surrounding skin. After his release the patient was treated with capsules by mouth, probably tetracycline. The ulcers healed during periods ranging from 2 to 4 months, all of them leaving scars. At present, the patient feels embarrassed by pain related to the scars on the lower extremities following slight physical effort, such as working for three-quarters of an hour.

Physical examination. Five circular, distinctly demarcated lesions with a diameter ranging from 8 to 12 mm were seen on the dorsum of the left hand just above the knuckles. They were slightly erythematous, with a narrow

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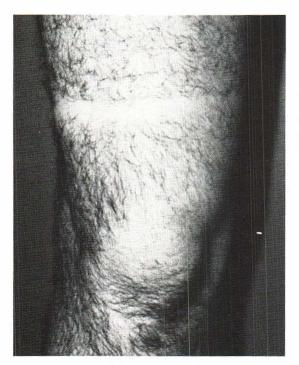


Fig. 1. A linear white horizontal zone is seen just above the knee of patient 1. The zone presents few hairs compared with the surrounding skin. Also, follicle openings appear to be few within this zone.

hyperpigmented zone in the periphery. The skin over the lesions was thin, atrophic and wrinkled, and there was a moderate atrophy of the subcutaneous tissue. Twentynine lesions were present on the lower extremities. located to the extensor and lateral aspects of the thighs, to the flexor and lateral aspects of the legs, as well as to the medial and lateral aspects of the feet (Fig. 2). Some of the lesions were situated in groups, but most of them were placed randomly without any special pattern or symmetry. The size of the lesions ranged from 5×5 mm to 27×18 mm. They were circular, oval or showed a more or less serpiginous periphery. Many of the lesions had a regular. circular or oval centre, which was bluish-red and atrophic, surrounded by two narrow peripheral zones, an inner, hypertrophic, distinctly demarcated zone of normal or whitish colour and an outer pigmented zone (Fig. 2). Other lesions were subdivided into such confluent circular areas with a diameter ranging from 5 to 10 mm. Many of the lesions showed considerable atrophy of the subcutaneous tissue. One circular distinctly demarcated lesion with a diameter of 13 mm was present on the abdominal wall. The lesion showed a white, hypertrophic centre and a hyperpigmented zone in the periphery.

Case 3

Patient 3 is a 38-year-old woman, examined in March 1980 in Denmark. She claimed to have been subjected to different types of torture in India in July and August 1974, some

of which resulted in skin sequelae. Her hands and feet were tied together and she was hung on a rod forced into the flexures of her arms and knees with the rod resting on two chairs. While being turned around in this position she was beaten on the soles of her feet and burned with a cigar on the nails of her big toes as well as on the soles of her feet and on the skin of her neck, shoulders and elbows. Furthermore, she was lifted by two persons standing on two chairs taking hold of the hair of the two sides of her head. In this position she was beaten on several areas of the skin. Immediately after the torture, the patient did not pay much attention to the many injured areas of the skin because of the more severe symptoms from other organs. However, she noticed that her head and feet were swollen and tender, and she had a burning sensation on the soles of her feet. One ulcer located on the sole of her left foot was painful when she walked; another ulcer, located on her right elbow, secreted a yellow liquid. Both these ulcers healed over a period of 12 months, leaving scars. A circular, black and rough area was observed centrally in the nails of her big toes a few days after the torture. Normal nails were present approximately one year after the torture, but a red circular area below the nails remained up to 1977. Immediately after the torture, she had a burning sensation at the roots of the hairs of the scalp, and a few days later several pimples developed in the scalp. Also she noticed increasing shedding of the hairs, leaving bald patches as well as a change in the colour of the hairs from black to brown. One tuft of hair appeared red. These alterations lasted for several months and were followed by regrowth of normal hair. At present the patient feels disturbed by a burning sensation on the sole of her right foot and of a burning sensation in the scalp when combing her hair.

Physical examination. An approximately rhomboid, indistinctly demarcated, slightly atrophic and hyperpigmented lesion measuring 6×5 mm was observed on the lateral part of the arch of the left foot (Fig. 3). Several circular, indistinctly demarcated hyperpigmented macules with a diameter ranging from 2 to 3 mm were seen diffusely distributed on the plantae. An approximately quadratic, indistinctly demarcated and depigmented macule measuring 4×4 mm was observed on the right elbow. The scalp was scaly, with no areas of alopecia. The hairs were black and normal.

DISCUSSION

The white zones observed on patient I most probably represent cicatricial alopecia. It is known that different types of mechanical trauma result in alopecia: massage alopecia, traction alopecia (7) and pressure alopecia (1). The above-mentioned history of a tightening rope over a one hour period of time is in good accordance with a combination of these types of trauma. In the last-mentioned type, however, regrowth usually occurs. Furthermore, the precise linear, circular appearance of the alopecic zone is difficult to explain unless the history of a rope tied around the thigh is accepted.

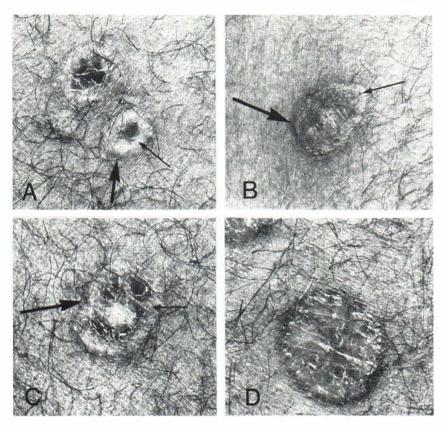


Fig. 2. Some of the lesions on the thighs of patient 2. The lesions are circular, oval or have a serpiginous periphery. Some of the lesions have an atrophic centre, surrounded by two narrow peripheral zones, an inner hypertrophic, distinctly demarcated zone (thin arrows) and an outer

pigmented zone (thick arrows). One small lesion lacks the atrophic centre (A), one large lesion lacks the hypertrophic zone (D). Some lesions are subdivided into small circular, confluent areas (C).

Spontaneously occurring conditions are not known to be associated with the kind of circular alopecia described here.

The lesions observed in patient 2 are most prob-



Fig. 3. An approximately rhomboid, indistinctly demarcated, hyperpigmented lesion (arrow) on the planta of the left foot of patient 3.

ably scars following deep necrotizing processes in the skin and subcutaneous tissue. Such scars may result from the destruction of connective tissue by physical or chemical trauma or by inflammatory processes such as abscesses, granulomata and necrotizing vasculitis. However, the distribution of the scars makes spontaneously occurring inflammatory processes unlikely. The size and shape of some of the scars are compatible with trauma caused by a burning instrument of the size and shape described by the patient, when the appearance of an inflammatory zone around the damaged areas is considered (Fig. 2). A central necrotic area and a narrow distinctly demarcated inflammatory zone in the periphery were characteristic findings in third-degree burns produced by an electrically heated metal instrument on the skin of pigs under systemic anesthesia (4). Some of the scars showed obvious sequelae to such an inflammatory zone (Fig. 2).

Reflex actions of the patient might have caused small movements of the instrument during the burning, explaining the size and shape of the large scars. The small scars with a diameter of 5 mm might result from a poor contact between the skin and the instrument, which could have been slightly convex. Furthermore, in pigs under systemic anesthesia the application of varying amounts of heat energy has been shown to produce lesions with diameters of varying size (5). The scars are thus most probably sequelae to third-degree burns. Alternating current at high frequency as well as direct current—cathode area—causes macroscopical alterations similar to those found in third-degree burn, but often with a subdivision into small circular, confluent areas (4). However, the patient was not aware of contact with another electrode, which does not exclude such a contact, but makes it less likely. Two electrodes placed within the area of the cross-section of a cigarette would probably not produce a scar having the diameter of 12 mm and a periphery which is regular and circular.

The rhomboid lesion on the left planta and the lesion on the right elbow observed in patient 3 have localizations which correspond with the history of combustion and subsequent ulceration. Their size and shape could be in agreement with the size and shape of a burn caused by an ember from a small cigar, and they might be scars following such burns. As the sears observed in patients 2 and 3 might represent injuries caused by 'instruments' of approximately equal size, their difference in size probably relates to the different amounts of energy used in the two types of torture. While the regular, distinctly demarcated outline of the lesions in patient 2 is well explained by the injury of a circular metal rod, the irregular, indistinctly demarcated outline of the lesions in patient 3 on the other hand relates well to the injury of an ember from a cigar. Circular scars with a diameter ranging from 5 to 7

mm have previously been reported to follow burns of a cigarette (2). The circular lesions of patient 3 are probably unrelated to the torture, as they were diffusely distributed on both plantae. The appearance of pimples and alopecia a few days after the torture is typical of traction alopecia (6). In addition the history of discoloration of the hair might be related to the history of trauma (8), but changes in food supply—particularly deficiency in protein—(9) could also be considered.

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