



Manifestations of cruel, inhuman types of behavior and torture of Ukrainian military who died in captivity

Maryna Gunas^{a,*}, Volodymyr Mishalov^b, Kostyantyn Voroshilov^d, Olexandr Petroschak^d,
Volodymyr Khyzhniak^c, Oksana Makarenko^d, Andriy Morgun^e, Valery Gunas^a,
Anatolii Perebetiuk^a

^a National Pirogov Memorial Medical University, Vinnytsya, Pirogov Street 56, 21018 Vinnytsia, Ukraine

^b Shupyk National Healthcare University of Ukraine, Dorohozhitska Street 9, 04112 Kyiv, Ukraine

^c Kharkiv National Medical University, Nauky Avenue 4, 61000 Kharkiv, Ukraine

^d Kyiv Regional Bureau of Forensic Medical Examination, Orangeriina Street 7, 04112 Kyiv, Ukraine

^e Kharkiv Regional Bureau of Forensic Medical Examination, Dmitrivska Street 14, 61052 Kharkiv, Ukraine

ARTICLE INFO

Keywords:

Forensic medicine
Bodily injury
Torture
Istanbul Protocol
Rome Statute

ABSTRACT

The given information and forensic medical characteristics of injuries found on the bodies of Ukrainian soldiers who were in Russian captivity and died as a result of cruel, inhuman treatment and torture in 2022–2023. According to their nature and morphological features, the damage could be the result of high temperature action using hot metal objects, but more likely, the result of the use of electric current conductors (bare end of the wire). In other cases, after the exhumation of the occupied territory of the Kharkiv region, the manifestations of torture were brain injuries and fractures of the bones of the body caused by blunt hard objects with a limited surface. All the injuries described by us correspond both to the list of physical evidence of torture of the “Istanbul Protocol” and to the list of war crimes of the “Rome Statute”.

1. Introduction

Russia's invasion of Ukraine led to numerous cases of human rights violations. This includes more than 300 cases of Russian military damage to healthcare facilities in Ukraine, the deportation of almost 2 million Ukrainian residents to Russia, the death of about 22,000 civilian residents of Mariupol, etc. [1]. In this connection, the issue of studying legal norms regarding the protection of human rights, in particular against torture, mutilation and other violent acts, becomes relevant.

The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment and Punishment was adopted by the United Nations General Assembly on December 10, 1984 and entered into force on June 26, 1987. Ukraine implemented the “Council of Europe Convention on the Prevention of Violence against Women and Domestic Violence” into domestic legislation and the fight against these phenomena“ dated 11.05.2011, but the norms of the Convention protect not only women, but are applied to all victims of violence (men and children of any sex) in peacetime and in situations of armed conflict. The

ratification of the Convention took place on June 20, 2022, with the adoption of the Law of Ukraine dated June 20, 2022 No. 2319-IX “On the Ratification of the Council of Europe Convention on the Prevention of Violence Against Women and Domestic Violence and Combating These Phenomena“ [2].

Important for the protection of human rights is the “Istanbul Protocol” – a guideline designed to serve as international principles for assessing the actions of persons who use torture and ill-treatment of people, as well as for investigating cases of torture and other cruel, inhuman or degrading treatment and transfer of reports to investigative, judicial or other authorities [3].

The treatment of prisoners of war, in turn, is clearly outlined in the Geneva Convention [4]. In particular, both Ukraine and Russia are participants in the Geneva Conventions and Protocols.

From the first day of Russia's full-scale invasion of Ukraine, the Statute of the International Criminal Court (hereinafter referred to as the “Rome Statute”) [5] became more relevant than ever for the Ukrainian side. In particular, according to Section 2 “Other Serious Violations of

* Corresponding author.

E-mail addresses: neuronchik.gunas@gmail.com (M. Gunas), voroshilovk@ukr.net (K. Voroshilov), petroschak@ukr.net (O. Petroschak), kievsudmed@bigmir.net (O. Makarenko), kharkivobsme@ukr.net (A. Morgun).

<https://doi.org/10.1016/j.legalmed.2024.102395>

Received 30 December 2023; Accepted 5 January 2024

Available online 6 January 2024

1344-6223/© 2024 Elsevier B.V. All rights reserved.

the Laws and Customs of War Applicable to International Armed Conflicts" (Article 8 (2) (b) of the Rome Statute), it is a crime to kill or injure a combatant who, having laid down his arms or having no other means of protection, surrendered, as well as treacherous killing or wounding of persons who are citizens of the opposite side of the conflict or representatives of the enemy army.

In recent years, only one report was published in Ukraine about the torture of Ukrainian citizens by the Russian military in some de-occupied territories based on the results of forensic examinations of victims of violence and exhumed corpses [6]. At the same time, a small number of works from the domestic literature are devoted to the study of the use of electric current by criminals as one of the means of torture [7].

Therefore, given the fact that the armed conflict unleashed by the aggressor in Ukraine continues and is in an active phase, the identification of manifestations of torture, including the use of electric current, and other cruel, inhuman or degrading types of treatment.

2. Materials and methods

The objects of the study were examination materials, namely archival "Conclusions of an expert examination" of the Kyiv and Kharkiv Regional Bureau of Forensic Medicine (Dergachiv branch) regarding the death of two Ukrainian soldiers who died while in Russian captivity during 2022–2023. The bodies were exhumed after the liberation of the occupied territories. In particular, 6 flaps of skin with existing lesions similar to electric marks, which were removed from different parts of the body, were examined. The skin flaps had pronounced decay changes, so they were subsequently restored in an alcohol-vinegar solution, as a result of which they acquired elasticity and the morphological

properties of the damage were restored. Before the start of the study, the skin flaps were stored in the freezer of the refrigerator at a temperature of -18°C . Before the start of the study, they were thawed and dried at room temperature for 2 h. The damage was examined visually and with the help of a stereomicroscope MBS-9.

All studies were performed in accordance with current Ukrainian legislation, in particular Order No. 6 of the Ministry of Health from 1995 [8].

3. Cases presentation

From the words of residents who were under Russian occupation in the village of Kozacha Lopan, Dergachiv district, Kharkiv region, since March 2022, it is known: on 05.05.2022, the Russian occupiers buried two servicemen of the Armed Forces of Ukraine in the cemetery in one grave, erected a cross (Fig. 1), on which they wrote "No. 1" and "No. 2". It is also known from the words of the residents that the occupiers tortured them for some time in the basement of this village.

Examination of the bodies after their exhumation revealed numerous fractures of the bones of the skull, lower jaw, and ribs. It should be noted that the fractures of the head bones of the deceased were localized in the same right temporal-parietal region (Figs. 2, 3). They were oval in shape and had significant dimensions, rather large bone fragments immersed in the skull cavity were identified in them. These head fractures could have been caused by the repeated impact of a blunt object that had a significant mass and a limited contact surface, similar to a hammer or a sledgehammer.

Fig. 4 shows a photo illustration of direct fractures of the ribs on the left, which were formed as a result of repeated impact actions of a blunt

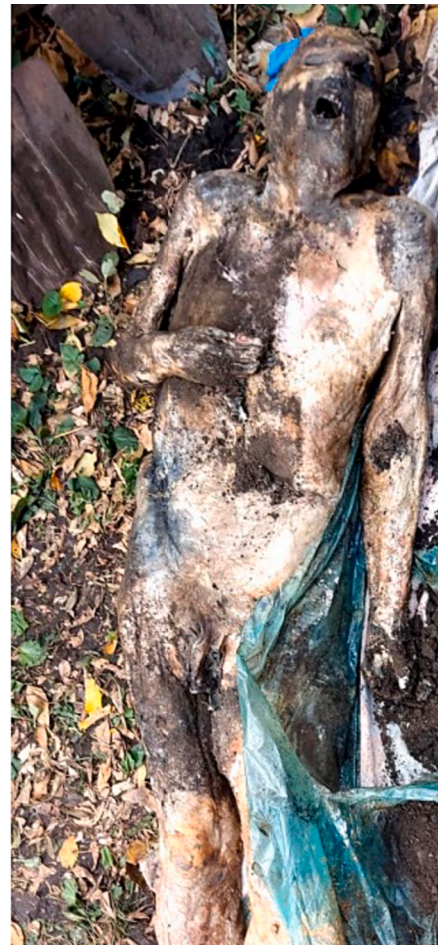


Fig. 1. Place of burial and exhumation of servicemen of the Armed Forces of Ukraine.



Fig. 2. Compressed fractures of the right parietal (a) and temporal (b) bones of the head of corpse No. 1.



Fig. 3. Compressed fractures of the right parietal (a) and temporal (b) bones of the head of corpse No. 2.

object, the individual properties of which were not reflected in the injuries. At the same time, the object that caused this fracture also had a significant mass and acted with significant kinetic energy (force).

Analysis of skin flaps from the chest of the corpses of Unknown men from the archive of the Kyiv Regional Bureau of Forensic Medical Examination for 2022–2023 revealed the following: an indistinct area with significant blood flow and compaction of soft tissues from bright red to dark maroon colors, as well as four small, randomly located dotted areas of black color with a compacted surface (Fig. 5), which, according to their morphological features, could be the result of both the action of protruding parts of the object (objects) with a high thermal effect, and as a result of contact with an electric current conductor (bare end of the wire) with the corresponding by him on other pieces of the skin of the Unknown men, there were also areas of a rounded shape, black in the center with a sinking bottom, and brown on the periphery, with a roller-like increase of soft tissues of dark brown color and their compaction in the direction of the central part (Fig. 6 a, b). According to their morphological features, the specified damage could be the result of both

the thermal action of an object with a limited contact surface of a rounded shape, and the result of contact with an electric current conductor (bare end of the wire) with a similar action both at a straight (Fig. 6 a) and at an indirect angle (Fig. 6 b). An electric mark is a change in the skin that occurs in the place of its contact with a source of technical current, and is a characteristic (specific) sign of the action of an electric current. Visually (macroscopically) it is determined in the form of: a) a typical electric label – a “lightning bolt” in the area of current input and output; b) not a typical electric mark – abrasion or roseola - skin formation that is dense to the touch, often light yellow or gray-yellow in color, oval or rounded in shape, with a sinking bottom and ridge-like elevation of the edges; c) II-III-degree skin burn.

One of the mechanisms of the effect of electric current on the human body is the thermal effect - the formation of burns. Therefore, as small 2–3 mm randomly arranged dotted areas of black color, as well as rounded areas of black color with compaction of soft tissues and a finely embossed surface, are probably a manifestation of the thermal effect of electric current in the form of burns, possibly due to the action of the



Fig. 4. Rib fractures were discovered during the autopsy of one of the exhumed soldiers.



Fig. 5. A flap of skin with four injuries (electrical marks) in the form of small, randomly arranged dotted areas of black color with a compacted surface.

exposed end of the electric current conductor (wire).

Therefore, the multiplicity of physical injuries in Ukrainian prisoners of war, the long duration of their infliction, the similarity of the nature of the injuries and the instrument of injury with the same direction of its movement, the localization of injuries on the same side of the head of the victims, whose bodies were allegedly lying on the floor – are distinct manifestations of torture and torture. Repetitiveness of the method, posture and place of injury indicates the possibility of torture by the same person.

4. Discussion

The geography of the distribution of torture is extremely wide and covers different continents. A significant amount of information on torture concerns the Middle East region. In particular, the authors of the study recorded cases of torture during military conflicts in the Balkans, Israel and Sri Lanka [9]. The results of a large meta-analysis of 266 studies on cases of torture revealed cases of inhumane treatment in 101 countries concerning 103,604 people. The authors provide data that the most popular methods were beating or trauma with a blunt object, electric torture, as well as starvation or dehydration [10].

Under the conditions of such a wide distribution of the number of cases of torture, the role of the forensic medical expert is growing significantly [11]. This especially applies to countries where a large-scale military conflict is taking place, such as Ukraine after the beginning of the invasion of Russia. Against this background, the importance of humanitarian forensic action becomes more obvious, which allows to find and identify the bodies of dead persons who have gone missing, and thus ensure their dignified burial and the peace of their relatives [12]. No less important is the detection of signs of violent acts on the bodies of the deceased, namely traces of torture.

The autopsy still remains a valuable source of information in cases of torture and in some cases, including the specificity of the location and nature of the injuries, allow us to suspect the type of torture that was committed against the person. On the other hand, in cases of non-specific blunt impact trauma, findings that can be obtained at autopsy are limited to hemorrhages, fractures, crushing of organs of different localization, shape and size. Externally, the same non-specific sores, bruises and wounds are observed. More specific injuries can be detected when using specific types of torture, such as falanga, reverse hanging, etc [13,14,15,16].

In any case, the examination of such victims or the bodies of deceased persons must be thorough and cover all parts of the body, especially sensitive areas such as the genitals, nipples, and anus. In addition, attention should be paid to traces of the action of various physical factors – electric current, fire, water [17].

It is worth considering the regional specificity of certain types of torture. So “water treatment” is typical for Bangladesh, the “tyre” is more for Syria, and “telephono” and “submarino” for Peru [18].

An important factor affecting the amount of material evidence in the autopsy process is the condition of the body. Decomposition of the body significantly reduces the amount of information that can be obtained during the examination of the body. For the most part, as in our case, most of the findings are limited to the condition of the bones (detection of fractures). At the same time, even in cases of significant putrefactive changes in the body, it is possible to identify the traumatic object, the intravitality of its formation, etc. [19].

In the scientific literature, the cases of the use of electric current for torture are described in a small number [7,20], which at the same time does not minimize the need for a detailed study by forensic medical experts of this type of injuries.

The skin lesions indicated by us in the descriptive part of the publication correspond to the morphological features of skin lesions caused by contact electroshock devices under different conditions, which were found in the course of experimental studies and described in clinical observations [13,21,22]. In particular, the histological examination of



Fig. 6. Patches of skin with damage in the form of a rounded area of black color with compaction of soft tissues and a finely embossed surface.

the skin from the suspected area of electric current entry (although even in this case it is impossible to exclude the effect of high temperature) is a strong evidence in the absence of decomposition changes [14].

An effective way to confirm the effect of technical electricity is the use of modern laboratory research methods [23]. The lack of such data in the case of our study is the result of the terrible state of forensic laboratories in Ukraine, which does not allow us to clearly judge the nature of the injuries found on the skin flaps submitted for research.

5. Conclusions

- (1) The circumstances and causes of death stated in the materials of criminal cases and probably electric tags on the skin of various parts of the bodies of Ukrainian military personnel in the studied cases, who were in captivity in 2022–2023, give grounds to believe that they died as a result of cruel, inhumane types of treatment and torture.
- (2) According to their nature and morphological features, both small randomly located dotted areas on skin flaps and single areas of larger sizes, rounded in shape with a central part of black color and a sinking bottom and a roller-like elevation of soft tissues on the periphery and their compaction - more likely due to all could be the result of the thermal effect of electric current in the form of burns. At the same time, in the absence of results of histological and spectral studies, the effect of high temperature using hot metal objects is not excluded.
- (3) Injuries in the form of numerous fractures of the bones of the head and torso found on the corpses of Ukrainian soldiers who were in Russian captivity are clear physical evidence of torture and mutilation and other cruel, inhuman or degrading treatment in accordance with the “Istanbul protocol”.
- (4) The multiplicity of bodily injuries, the peculiarities of their localization and the long duration of their infliction, the similarity between the nature of the injury and the instrument of injury – are clear manifestations not only of torture, but also evidence of war crimes committed by the Russian military, in accordance with the Rome Statute of the International Criminal Court.

Funding

The authors received no financial support for the research, authorship or publication of this article.

Declaration of competing interest

The authors declare that they have no known competing financial

interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We thank the armed forces of Ukraine, in particular the air defense forces, and international partners who support Ukraine. This publication would not be possible without you.

The authors received no financial support for the research, authorship or publication of this article.

References

- [1] B.S. Levy, J. Leaning, Russia's war in Ukraine—the devastation of health and human rights, *N. Engl. J. Med.* 387 (2) (2022 Jul 14) 102–105, <https://doi.org/10.1056/NEJMp2207415>.
- [2] On the ratification of the Council of Europe Convention on the prevention of violence against women and domestic violence and the fight against these phenomena: Law of Ukraine dated 20.06.2022 No. 2319-IX [Electronic resource]: <https://ips.ligazakon.net/document/t222319?an=1> (date of application: 15.10.2023).
- [3] V. Iacopino, O. Ozkalipci, C. Schlar, K. Allden, T. Baykal, R. Kirschner, Manual on the effective investigation and documentation of torture and other cruel, inhuman or degrading treatment or punishment (The Istanbul Protocol). Manuscript accepted for publication by the United Nations High Commissioner on Human Rights. Available from the World Wide Web: <http://www.phrusa.org>. 2001.
- [4] J.S. Pictet, Geneva convention. International Committee of the red cross, 1952.
- [5] United Nations, Preparatory Commission for the International Criminal Court, Rome Statute of the International Criminal Court, UN, 1998.
- [6] V. Mishalov, V. Voichenko, K. Voroshilov, I. Rozovik, O. Petroschak, O. Makarenko, V. Khizhnyak, A. Morgun, Y. Polyuk, Y. Fenenko, Manifestations of torture of Ukrainian citizens by the Russian military in some de-occupied territories according to the results of forensic examinations of victims of violence and exhumed corpses, *Forensic-Med. Exam.* 1 (2023) 89–102, <https://doi.org/10.24061/2707-8728.1.2023.13>.
- [7] I.V. Ustinchenko, A case of torture of a victim in forensic practice, *Forensic-Medical Examination.* 1 (2017) 111–114, <https://doi.org/10.24061/2707-8728.1.2017.28>.
- [8] Order of the Ministry of Health of Ukraine No. 6 “On the development and improvement of the forensic medical service of Ukraine” dated January 17. 1995.
- [9] J.R. Busch, S.H. Hansen, H.P. Hougen, Geographical distribution of torture: An epidemiological study of torture reported by asylum applicants examined at the Department of Forensic Medicine, University of Copenhagen, *Torture J.* 25 (2) (2015) 12–21, <https://doi.org/10.7146/torture.v25i2.109670>.
- [10] A. Milewski, E. Weinstein, J. Lurie, A. Lee, F. Taki, T. Pilato, C. Jedlicka, G. Kaur, Reported methods, distributions, and frequencies of torture globally: a systematic review and meta-analysis, *JAMA Netw. Open* 6 (10) (2023 Oct 2) e2336629.
- [11] A. Cioffi, C. Cecanecchia, Role of forensic medicine in addressing the war crimes: Perspective from Russia-Ukraine conflict during the COVID-19 pandemic, *Med. Sci. Law* 63 (2) (2023 Apr) 168–173, <https://doi.org/10.1177/00258024221125135>.
- [12] M.V. Tidball-Binz, S. Cordner, Humanitarian forensic action: a new forensic discipline helping to implement international law and construct peace, *Wiley Interdiscip. Rev.: Forensic Sci.* 4 (1) (2022 Jan) e1438.
- [13] M.S. Pollanen, The pathology of torture, *Forensic Sci. Int.* 1 (284) (2018 Mar) 85–96, <https://doi.org/10.1016/j.forsciint.2017.12.022>.
- [14] M.S. Pollanen, The dead detainee: the autopsy in cases of torture, *Academic Forensic Pathology.* 7 (3) (2017 Sep) 340–352, <https://doi.org/10.23907/2017.031>.

- [15] S.D. Arachchi, R. Ruwanpura, Evidence of multiple methods of torture in a case from Sri Lanka, *J. Forensic Leg. Med.* 1 (67) (2019 Oct) 15–18, <https://doi.org/10.1016/j.jflm.2019.07.007>.
- [16] C.C. Nwafor, N. Nwafor, B. Eziagu, C.I. Owobu, Retrospective Post Mortem Study of Custodial Deaths in Uyo, South-South, Nigeria, *West Afr. J. Med.* 38 (7) (2021 Jul 1) 689–694.
- [17] J.C. Herath, M.S. Pollanen, Clinical examination and reporting of a victim of torture, *Academic Forensic Pathol.* 7 (3) (2017 Sep) 330–339, <https://doi.org/10.23907/2017.030>.
- [18] P.A. Moisaner, E. Edston, Torture and its sequel—a comparison between victims from six countries, *Forensic Sci. Int.* 137 (2–3) (2003 Nov 26) 133–140, <https://doi.org/10.1016/j.forsciint.2003.07.008>.
- [19] V.N. Ambade, A.N. Keoliya, R.B. Deokar, P.G. Dixit, Decomposed bodies—still an unrewarding autopsy? *J. Forensic Leg. Med.* 18 (3) (2011 Apr 1) 101–106, <https://doi.org/10.1016/j.jflm.2011.01.009>.
- [20] S. Alqassab, L. Mathieu, Torture-induced hand electrical injury: A case report, *J. Forensic Leg. Med.* 1 (77) (2021 Jan) 102085, <https://doi.org/10.1016/j.jflm.2020.102085>.
- [21] D.H. Lee, M.J. Desai, E.M. Gauger, Electrical injuries of the hand and upper extremity, *JAAOS-J. Am. Acad. Orthopaedic Surg.* 27 (1) (2019 Jan 1) e1–e8, <https://doi.org/10.5435/JAAOS-D-17-00833>.
- [22] V.D. Mishalov, E.A. Varfolomeev, I.O. Ryumina, Morphological features of skin damage caused by contact electric shock devices under different conditions, *Morphologia.* 14 (3) (2020) 56–62, <https://doi.org/10.26641/1997-9665.2020.3.143-147>.
- [23] O.V. Mikhailenko, H.H. Roshchin, O.O. Dyadik, I.V. Irkin, T.A. Malisheva, Y. Y. Kostenko, V.I. Gunas, A.P. Hel, Efficiency of determination of elemental composition of metals and their topography in objects of biological origin using spectrometers, *Indian J. Forensic Med. Toxicol.* 15 (1) (2021) 1278–1284, <https://doi.org/10.37506/ijfmt.v15i1.13592>.