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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии საქართველოს სამედიცინო სიახლენი

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No 10 (307) 2020

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> ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ ТБИЛИСИ - НЬЮ-ЙОРК

GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board and The International Academy of Sciences, Education, Industry and Arts (U.S.A.) since 1994. **GMN** carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

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GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

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тел.: 995(32) 254 24 91, 5(55) 75 65 99

Fax: +995(32) 253 70 58, e-mail: ninomikaber@geomednews.com; nikopir@geomednews.com

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GMN Editorial Board 7 Asatiani Street, 4th Floor Tbilisi, Georgia 0177

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Fax: 995 (32) 253-70-58

CONTACT ADDRESS IN NEW YORK

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- 3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

- 4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.
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- 3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).
- 4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).
- 5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.
- 6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით tiff ფორმატში. მიკროფოტო-სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ-რათის ზედა და ქვედა ნაწილები.
- 7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა უცხოური ტრანსკრიპციით.
- 8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.
- 9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.
- 10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.
- 11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.
- 12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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SEVERE PAIN AND SUFFERING AS EFFECTS OF TORTURE: DETECTION IN MEDICAL AND LEGAL PRACTICE (REVIEW)

¹Tavolzhanska Yu., ¹Grynchak S., ²Pcholkin V., ²Fedosova O.

¹Yaroslav Mudryi National Law University, Kharkiv; ²Kharkiv National University of Internal Affairs, Ukraine

The correct determination of the effects of cruel treatment and punishment is of great importance, since it is one of the main factors influencing taking the decision by the law enforcer about what type of ill-treatment and punishment took place. In particular, depending on severity of the effects the victim, the European Court of Human Rights (ECHR) identifies the torture, inhuman or degrading treatment and punishment¹, and the national investigative and judicial authorities qualify the offense as the said torture, torment or other criminal offense.

Solving the issue of the effects has a medical load too. The choice of the medical rehabilitation course (which means the patient's chances to return to a normal life) depends on detection of the said effects. At present, if not to take into account the work of state (municipal) healthcare institutions focused on implementation of the protocols rather than on taking into account the patient's peculiarities and his/her real recovery, the rehabilitation, in the full sense of the word, is provided only by highly specialized centers. The International Rehabilitation Council for Torture Victims (IRCT) is the most famous of them. Its work has a high demand, and its results are quite promising. Therefore, the IRCT network is constantly growing, and today it includes more than 150 centers in 75 countries [63]. Unfortunately, the work of this center in Ukraine [71] is not characterized by the successes achieved by the IRCT center in Georgia [89]. There are also national rehabilitation centers that extend their activities over the territory of only one country. In particular, Freedom from Torture is a British institution consisting of five centers located at different points of the United Kingdom [92]. Ukraine has no such national rehabilitation center. Every year, the United Nations Voluntary Fund for Victims of Torture allocates tens of thousands of dollars, in particular, to private clinics that provide specialized support to victims of this crime [74]. The victims themselves and their families seek to receive the assistance in the specialized institutions.

The constant increase in the number of narrow-profile centers and a high demand for medical care in them, the special significance of the effects of cruel treatment and punishment for deciding on the type of offense prohibited by Article 3 of the 1950 Convention for the Protection of Human Rights and Fundamental Freedoms [67], indicate that the torture effects are far from typical and require a special attention. And that means that their detection deserves to be the subject of a separate scientific work.

The aim of the study is to identify the features and to determine the relationship between medical and legal (investigative & judicial) practice on detection of the torture effects.

Material and methods. This paper is based on a thesis study devoted to the criminal law problems of the torture, prepared by the Department of Criminal Law No. 1, Yaroslav Mudryi

For completeness of the material presentation, we have to note that not all scientists adhere to the point of view that it is the criterion of effects severity that determines the distinction between torture and inhuman or degrading treatment and punishment. In particular, the United Nations Special Rapporteur on Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment, Manfred Nowak, considers the goal of the perpetrator and helplessness of the victim as such a criterion [72,79].

National Law University, Kharkiv, Ukraine [43]. Due to participation in seminars conducted by the prosecution and security services of Ukraine, the author has understood that the results of the scientific work shall be of more applied nature. For this reason, the subject of the study was expanded, and some specialists from related legal sectors were attracted to preparation of this article. In this case, the publications of rehabilitation centers for torture victims took center stage in the list of the used literature. There were also used specialized medical journals, manuals for physicians, publications of the International Association for the Study of Pain (IASP) and the Ukrainian Association for the Study of Pain. The picture of our knowledge in the field of medicine is substantially supplemented by the answers prepared by leading experts of Bogomolets National Medical University, Kyiv, Ukraine and Danylo Halytsky Lviv National Medical University, Lviv, Ukraine. Enough attention has been paid to the latest scientific achievements in the field of rehabilitation of torture survivors. The United Nations reports on assistance to victims of tortures were also taken into consideration, as well as official explanations of the Office of the United Nations High Commissioner for Human Rights (OHCHR) on understanding the nature of tortures. The legal component of the work is supported by the provisions of international treaties, criminal codes of the post-Soviet countries. The empirical basis for the study was provided by 41 final court decisions on the following cases: 726/777/14-к [3], 647/507/14-к [7], 759/7180/14к [34], 579/952/14-к [25], 683/298/14-к [33], 686/23492/14-к [56], 11/796/9/2014 [2], 758/11330/14-K [29], 492/2080/14к [5], 208/10261/14-к [15], 154/1557/15 [10], 219/1584/15к [4], 676/991/15-к [19], 445/563/15-к [17], 618/641/15-к [12], 163/225/15-к [1], 283/1495/15-к [27], 387/407/16-к [14], 487/6385/16-к [16], 370/155/16-к [18], 400/77/17 [28], 473/620/17 [9], 369/4590/17 [21], 726/1160/17 [30], 635/6445/17 [35], 127/16930/17 [8], 473/1064/17 [44], 203/1165/17 [22], 609/210/17 [26], 484/1197/18 [36], 718/993/18 [23], 640/5131/18 [20], 753/17036/18 [11], 311/144/18 [57], 718/1755/18 [60], 759/19368/18 [32], 640/22678/18 [59], 310/9324/18 [58], 665/1529/18 [37], 426/24003/18 [31], 718/2744/19 [24]. These cases were selected according to the following criteria: all court decisions made under Article 127 "Torture" of the Criminal Code of Ukraine since 2014 till 2019 inclusively, being in the public domain as of March 1, 2020, on the official website of the "United State Register of Court Solutions" http://reyestr.court.gov.ua/. The article also uses 2 court decisions on cases 638/5928/18 [13], 610/3874/15-k [6], which have no legal force as of March 1, 2020, but are of interest for the purposes of this study. These decisions were not taken into account in determining the statistical indexes, but were used in the article as examples of the application of Article 127 of the Criminal Code of Ukraine.

In the course of the study, the following methods were used: analysis (when ascertaining the content of legal norms relating to prohibition of the torture; studying scientific publications related to pain-identification problems, rehabilitation of torture victims), induction, statistical method (when working with decisions of national courts), systemic method (when determining the relationship between medical and legal (investigative & judicial) practice on detection of the torture effects).

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Results and discussion. The starting point in determining of what are really, in principle, the effects of the torture is provided with provisions of Article 1 of the 1984 Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. The latter states that the torture should be understood as any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person [68]. Therefore, in particular, severe pain and suffering are the effects of torture and are the subject of assessment by the law enforcer at the stage of qualification of the offense committed by the perpetrator. Undoubtedly, there is a certain conventionality in such a conclusion, since pain, by its nature, is inseparably associated with the violence itself and is rather its companion than the result. Perhaps that is why the OHCHR, while interpreting the torture, does not distinguish pain and suffering as independent elements of this definition [72]. At the same time, we see that OHCHR refers to the ECHR practice, according to which, the European Court evaluates the power of pain and suffering in each case [72]. The ECHR position is quite justified. For the same cruel treatment or punishment, quite different effects can occur (for example, for a child and for an adult), which means that the types of offence will be different. It is possible to take into account the difference in cases, using some kind of formal element. In this case, this element is the power of pain and suffering. In addition, only on the background or as a result of strong negative reactions of the body, can such "breakdown" of the body and personality occur, which is described by the physicians working with victims of the tortures [69]. Therefore, it is simply impossible not to single out severe pain and suffering as self-sufficient effects. When comprehensed, the above convenality turns out to be truly justified. However, this justification is possible only in the context of the tortures. Not without reason, Metin Başoğlu writes that pain and suffering are an independent subject of proving only in the torture court proceedings [91].

In the criminal codes of the post-Soviet countries, we find provisions on pain and suffering, which are similar to those contained in Article 1 of the 1984 Convention. In particular, these effects of the torture are indicated in Art. 113, 293 of the Criminal Code of the Azerbaijan Republic [45], Art. 119 of the Criminal Code of Armenia [46], Art. 1441 of the Criminal Code of Georgia [47], Art. 128 of the Criminal Code of the Republic of Belarus [49], Art. 1661 of the Criminal Code of the Republic of Moldova [51], Art. 1821 of the Criminal Code of the Republic of Turkmenistan [53], Art. 127 of the Criminal Code of Ukraine [39]. Only suffering is mentioned in Art. 143 of the Criminal Code of the Kyrgyz Republic [48], Art. 117 of the Criminal Code of the Russian Federation [55], Art. 146 of the Criminal Code of the Republic of Kazakhstan [50], Art. 1431 of the Criminal Code of the Republic of Tajikistan [52]. Only the legislator of the Republic of Uzbekistan omitted the formalization of pain and suffering - see Art. 235 of the Criminal Code of the Republic of Uzbekistan [54]. The aforementioned means that the investigative and judicial authorities of the post-Soviet space countries shall have the same approach to the proving of torture as that of the ECHR: in particular, the detection of severe pain and suffering shall be a mandatory part of the work in establishing of the elements of the crime in question.

Below, we will present information that is basic and allows medical workers (general practitioners and narrowly focused practitioners, forensic experts) and the law enforcer (investigators, prosecutors, judges) to interact successfully with each other in detection the torture effects. Until today, medicine has not been able to study in the full scope the biopsychosocial phenom-

enon of pain. The IASP defines it as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage [70]. The concept of "suffering" is not used in neurological practice at all [40]. The scientists state that the following points of view regarding the pain shall be recognized as relevant: 1) an unpleasant sensory feeling that is associated with a possible or existing tissue damage; 2) an affective state of the body, which includes emotional, somatic and vegetative reactions; 3) a motivating state that modifies all organs and body system, creating an appropriate model of its reaction aimed at eliminating the causes of pain; 4) an integral function that mobilizes different functional systems to protect the body from the influence of harmful factors [61].

The classical diagnostics of pain is aimed at determining its physical and psychoemotional components with subsequent clarification of the features of their interaction [41]. To detect the physical component of pain, the neurophysiological techniques are, in particular, used, which by the mechanism of their implementation are reduced to mechanical, electrical and (or) thermal actions on the body. And the psychoemotional component is determined on the basis of the patient's answers. Among the questionnaires that help the patient to characterize their pain, known to us, it's possible to call: McGill Pain Questionnaire (MPQ), Visual Analogue Scale (VAS), Numeric Pain Scale (NPS), Categorical Pain Scale (CPS) [38], DN4 questionnaire, Leeds Assessment of Neuropathic Symptoms and Sings (LANSS), pain-DETECT questionnaire [62], face images pain rating scale. The principle of their use is quite simple - the patient is offered, according to pre-established criteria, to characterize by themselves the pain they experience. For example, according to MPO, the patient determines pain by 20 points, analyzing his sensory and emotional sensations, assessing the intensity of pain and reflecting the whole variety of pain syndrome. According to VAS, he points on a 10 cm ruler the intensity of his pain sensation from "0" ("no pain") to "10" ("unbearable pain"). It is worth to note that, when assessing their pain, the IRCT patients choose the highest indicators "8-10", marking a large number of pain areas on the body [42].

The self-analysis carried out by the patient himself is at the heart of pain diagnostics. A completely objective study of pain turns out to be impossible [40]. Due to it, the question arises: is it possible that a medical worker, on the basis of only the patient's answers, can determine the intensity of the pain, and the law enforcer, after him, can automatically transfer this to the field of jurisprudence (in particular, taking the medical conclusion to determine how serious are the effects that have occurred and, accordingly, what type of cruel treatment and punishment is there)? Of course not. Otherwise, the role of the medical worker and law enforcer would be of a purely technical nature.

First of all, it is necessary to note that it is the medical worker who determines the physical component of pain and its relationship with the psychoemotional component. This allows him to critically evaluate the patient's conclusions on pain. In particular, a neurotic person can evaluate even a minor mechanical effect as the factor causing the maximum pain. And the medical worker, realizing the inadequacy of the subjective assessment of a particular patient, will never issue a medical conclusion that there a severe pain took place. In addition, the medical worker has in his arsenal indirect methods of determining the pain intensity, namely: accounting the quantity of analgesics taken by the patient; monitoring his behavior (for example, can he breathe deeply or make active movements); monitoring the stress hormones, etc. Therefore, he can always put into question the pa-

tient's answers, having the results of an objective examination. For example, the assessments of the patient who performs physical exercises without obstruction, but at the same time assesses the pain as unbearable, are unlikely to be taken as a basis when the medical worker ascertains the intensity of pain. In turn, the law enforcer identifies, in a sense, a "conventional" effects, and, therefore, can give it a purely legal assessment. For example, to identify a severe pain, the following assessment criteria are suitable: objective one (intensity, duration) and subjective one (intolerance) [43]. Therefore, the work on detection of severe pain on the part of the medical worker and the law enforcer is filled with in-depth analysis and critical comprehension of its results.

Here the following important question arises: can the said subjects independently, without interacting with each other, detection the effects of the torture? Certainly not. The subject of proving in the cases of torture is the effects identified by Article 1 of the 1984 Convention. The physician does not work for the purpose of law enforcement. The forensic expert does not always take into account the peculiarities of legal regulation. For example, during the investigation of case 638/5928/18, the expert stated that the disability certificate of the victim, a child suffering from infantile cerebral paralysis, is not relevant to the essence of the investigation [13]. We strongly disagree with this, not least because the characteristics of the victim are directly related to identification of the pain strength. The law enforcer, even if he identifies the «conventional» effects, must state a result which, by its nature, tends towards the field of medicine. Therefore, his conclusions themselves are also not self-sufficient. That is why only the joint medical and legal detection of the severe pain and suffering is the prerequisite of a correct solution to the issue of the presence or absence of the torture effects.

It should be noted that we have not met in the national judicial practice a single case, in which a joint medical and legal detection of the effects of torture was carried out. This is connected: firstly, with the deep-rooted traditions in the work of investigative and judicial authorities - to identify the gravity of bodily injuries (in cases on crimes against life and health), but not the degree of pain and suffering; secondly, with the lack of recommendations on joint medical and legal identification of the intensity of pain and suffering in the Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (Istanbul Protocol) [73].

With consideration of specific nature of the Istanbul Protocol contents, as well as the fact that it is intended to serve as international guidelines for the *assessment of persons* who allege torture and ill-treatment, the lack in it of recommendations on the joint medical and legal detection of the severe pain and suffering does not deserve praise. However, the said omission itself can be explained by the fact that, in the Istanbul Protocol, the tortures are understood in the meaning of Article 1 of the 1984 Convention, the official interpretation of which does not provide for separation of severe pain and suffering as an independent element of the torture.

The absence of traditions and recommendations on identification of severe pain and suffering as a effects of torture leads to errors in the work of the investigative & judicial authorities. For example, in case 676/991/15-k, the perpetrator was prosecuted for intentional light bodily injury resulting in a short-term health disorder (Part 2 of Article 125 of the Criminal Code of Ukraine) and for torture (Part 1 of Article 127 of the Criminal Code Ukraine) in connection with the infliction of three blows with hand in the face during a five-minute domestic quarrel, one blow with a kitchen knife in the hip and one burning the stab and slash

wound with a cigarette [19]. In this case, the torture was identified only in relation to the last of the said episodes. Undoubtedly, the pain from burning with a cigarette is not similar to the pain of being hit. But in connection of what, did the law enforcer recognize a situational pain from burn as a severe pain mentioned in Article 1 of the 1984 Convention? The answer is not given by law enforce, and we have certain doubts about availability in this case of the effects that are characteristic of the torture. It is obviously that, in the future, in order to prevent such mistakes, the law enforcer shall have the appropriate recommendations on detect of severe pain and suffering. Therefore, the development of such recommendations is one of the main tasks for the scientific community.

We'd like to note that the ECHR, alongside with raising European standards for the protection of human rights, has lowered the bar for severity of the effects, upon the occurrence of which the offence could be considered as a torture. At the same time, the "upper limits" remained unchanged. In particular, there are still tortures, which in their cruelty are not inferior to medieval ones. Their effects are so serious that the victims require long years of rehabilitation [77]. The victims themselves state that they remain patients for their entire life [66]. The perpetrator destroys their personality, self-respect, and sense of self-worth [78]. After what they suffered, they are afraid to go further and believe that no one can understand their suffering [83]. The physicians who work with such patients describe them as "broken persons" [69]. What it takes to survive the drowning torture, during which there are: breath holding, fighting, physical exhaustion, rising levels of carbon dioxide, inhalation and ingestion of liquid, coughing, vomiting, loss of consciousness, respiratory and heart failure with a possible climax in the form of death [76]. During tortures, even the Near Death Experience phenomenon is possible, which is associated with the "exit" of consciousness from the body (a person "rises" to the ceiling and watches what is happening around his physical body) [80]. The studies prove that the effects of the crime in question arise at all levels - physical, psychological, social, spiritual, cultural, etc. Therefore, the treatment of such patients requires an integral approach [65], sometimes, with the use of non-standard methods (for example, art therapy [65], music therapy [87], etc.).

Given the condition of the victim of torture, the scientific literature has expressed the opinion that there exists a "torture syndrome" [42, 86] and the "breakdown of the person's autonomous self-regulation program" [43]. A special psychophysiological state appears with any torture. However, it manifests itself, to a greater extent, in availability of the so-called "remote" effects of this crime (that is, those ones that arise against the background or as a result of severe pain and suffering - muscle dysfunction, post-traumatic disorder, etc.). The Istanbul Protocol contains recommendations focused exactly on identifying the "remote" effects of torture. Wherein, studies conducted by the University of Edinburgh prove that even with the developed protocols, detecting these effects is not an easy task. And the more limited the clinical and legal resources of the state are, and the lower the level of its institutional potential is, the more difficulties arise when doing this work [64].

The "remote" effects of torture can be divided into three groups: physical, psychosomatic and mental. It is no mere chance that Article 1 of the 1984 Convention describes the effects of torture as: severe pain (which is most closely associated with physical changes), physical suffering (primarily related to psychosomatic effects), and mental suffering (mainly related to mental disorders).

Since the torture itself is aimed at destroying the person as a personality, the rehabilitation center physicians place the mental deviations in the first place among the effects of torture (chronic fear, depression, situational loss of connection with reality (flashback), negative self-perception [42]). The literature also describes psychosis, avoidance behavior, persistent personality changes, irritability, hyperactivity [75] and others. Much attention is paid to depression (MDD) and Post-Traumatic Stress Disorder (PTSD) [75, 81, 86]. The latter are called in the Istanbul Protocol the main mental effects of torture (Item 236) [73]. In science, it has even been suggested that the torture is erroneously associated with pain. For example, some Spanish scientists state that the torture implies a process aimed at submission and obedience, humiliation and psychological breakdown, and, therefore, a modern psychological torture displaces a pain-type one and is a more effective tool aimed at achieving the desired result in a short time [85]. Despite all this, we would not completely discount the pain as a effects of torture. Until today, many forms of this crime are associated with physical action on the human body. In addition, historically, the torture has formed as a crime aimed at destroying the personality through pain. Evidently, it was a tribute to the history and nature of this crime that brought a severe pain to the first place among the effects in Article 1 of the 1984 Convention. And in the Istanbul Protocol, the physical evidence of torture is described earlier than the psychological evidence (sections V, VI) [73].

Diagnosing the mental health of the torture victim is a key point in the work of physician since the impact on this type of health during this crime is quite serious and has effects that go far beyond physical changes [90]. The Istanbul Protocol states that a psychological examination and assessment of the psychological state of the alleged torture victim are mandatory (paragraph 104) [73]. In addition to examination for diagnostics of mental disorders in case of craniocerebral injury, PTSD and related diagnoses, a neuropsychological assessment is also recommended (Items 292, 298) [73].

Among physical effects of torture we may call pathological pain, persistent change in hormone levels and body temperature, functional changes in the heart functioning, vasospasms, fractures, torn ligaments, hemorrhages, and skin rashes. The physicians of rehabilitation centers also note blurred and double vision, diminished hearing, buzzing in ears, dizziness, loss of balance, difficulty in nasal breathing, loss of teeth, reflex cough, nausea, vomiting, disorder of gastrointestinal tract, weight loss, convulsions, dysuria, pollakiuria, oligomenorrhea, ulcers, wounds, dysfunction of joints and muscles, paresthesia, neuralgia, neurogenic pain, etc. [42]. The Istanbul Protocol associates identification of these effects with survey, medical anamnesis and medical examination (Items 163, 168, 173) [73]. The recommendations on conducting the medical examination are clearly stated as for organs and systems (skin, eyes, ears, nose, mouth and teeth, chest and abdominal cavity, musculoskeletal system, genitourinary system, central and peripheral nervous systems, Items 176-186) [73], as well as in connection with the form of torture (beating and other types of blunt injuries, hitting the feet, suspension, torture by position, electric shock, action on the teeth, strangulation, rape and sexual violence, Items 189-232) [73]. At the same time, the Istanbul Protocol does not contain restrictions on the methods of diagnostic research, indicating among the possible ones: x-ray visualization (x-ray images, radioisotope scintigraphy, computed tomography, nuclear magnetic resonance imaging, ultrasound imaging), biopsy for electric shock injury [73]. The latter is quite important. For example, in some cases, functional disorders may be more significant than morphological ones. Accordingly, the functional visualization can provide more insight into the extent of traumatic injuries and their functional effects. In this case, a scintillation imaging will be indispensable [88]. Besides, many forms of tortures do not leave visible marks (such as, for example, musical torture [82]). The changes that inevitably will come require to be detected. And any medical achievements are suitable for this purpose.

We attribute to the psychosomatic effects the irritable bowel syndrome (colon irritabile), psychomyogenic headache, etc. At the same time, we emphasize that the torture is an extreme event in human life and causes severe stress, which echoes are often not associated with pathological changes, but always comprise psychosomatic effects. That is why the patients often complain of pain, the organic nature of which cannot be explained by the physician. The Istanbul Protocol mentions identification of this group of effects in the context of determination of psychological deviations (Item 259) [73].

The physical, psychosomatic and mental effects of torture are "taken off the table" for this crime. That is, they are not an obligatory element of torture. But in most cases they inevitably come. In this aspect, it suffices to pay attention to the national judicial practice. In particular, physical, psychosomatic and mental changes are defined by the forensic expert as bodily injuries. The results of analysis of the national judicial practice show that among 41 cases of torture, bodily injuries occurred in 37 of them. That is, causing physical, psychosomatic and (or) mental changes, determined by the forensic expert as causing bodily injuries, occurs in 9 out of 10 cases of torture. Below we present diagrams showing percentage and quantitative incidence of bodily injuries inflicted during torture.

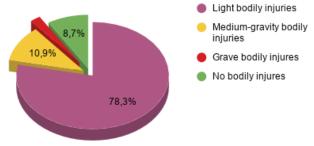


Fig. 1. Percentage of bodily injuries suffered during torture

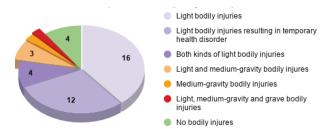


Fig. 2. Identification of infliction of bodily injuries during tortures (with reference to quantity of cases)

The detection of the physical, psychosomatic and mental effects of torture is the prerogative of the physician. For the law enforcer, the medical identification of the latter is another key to detection of severe pain and suffering. The presence of physical, psychosomatic and mental effects makes it possible to understand whether the effects that are provided for in Article 1 of the 1984 Convention have occurred. For example, during examina-

tion of case 492/2080/14-k by forensic expert, it was found that, judging by the number of physical injuries, there were at least 48 points of application of traumatic force [5]. Only this indicates that the pain should have been severe.

In the torture cases, bodily injuries and their gravity are determined by the forensic expert or on the basis of medical documentation fixing the physical, psychosomatic and (or) mental effects of torture (in particular, see case 718/1755/18 [60]), or on the basis of the examination of the victim (for example, see case 203/1165/17 [22]).

Conducting the forensic psychiatric examination in the torture cases is the exception rather than the standard procedure. With consideration of the Istanbul Protocol recommendations and the nature of the crime in question, this cannot be called satisfactory. Among 41 court decisions, only in 2 of them, we find an indication to conducting such an examination. According to case 487/6385/16-k, the perpetrator forced the minor to stand on salt for 16 hours, which led not only to bodily injures, but also to post-traumatic stress disorder determined by a comprehensive psychological and psychiatric examination [16]. And in the framework of the consideration of case 686/23492/14-k, the subject of such an examination was determination of the possibility of a minor victim to correctly perceive the circumstances of the case. In this case, his state of mind was not evaluated [56]. This raises a number of questions. In particular, according to the case file, at about 10 pm, the perpetrator kicked the victim, tied his hands and suspended him on the door. Then he stopped his mouth with a cloth and hit him with a metal stick in different parts of his body. The next day, having waked the child, the perpetrator again suspended him in the same way, stopped his mouth and hit him. In addition to the above, he hit the minor with a brick in the back of his head. Leaving a brick on his head, the perpetrator said that if the brick falls, he will hit the victim still harder. After returning in a while and noticing that the brick fell, the perpetrator continued hitting [56]. With consideration of the case circumstances, it remains a mystery why the mental state of the child who survived such a crime was not the subject of evaluation by the experts.

In investigative & judicial practice on detection of severe pain and suffering, a special attention is attracted by the tools that are not associated with the use of medical conclusions. In particular, to determine the effects of torture, the law enforcer rather often takes into account the testimony of both the victim and the witnesses. For example, in case 387/407/16-k, the court took into consideration the testimony of: a) the victim's son who indicated that he had found his mother tied to a tree, completely naked and drenched in solution of brilliant green; b) a medical assistant who explained that the victim complained of pain throughout her entire body, so he did her an injection of analgesic [14]. When examining case 610/3874/15-k, the court identified appearance of severe physical pain from the use of an electric shocker, paying attention to the protocol of search of the house of the accused, in which there was found a flashlight with electric shocker [6]. By the way, in view of the Istanbul Protocol recommendations [73] and those of the physicians of rehabilitation centers [84] on advisability of conducting the histological studies in cases of use of electric current, the approaches of the national law enforcer to this issue are inferior in their relevance. In the framework of examination of case 283/1495/15-k, the court found that the perpetrator forced the victim to be in a cold river. In assessing the effects of this offence, the law enforcer took into account the conclusion of the regional hydrometeorology center regarding temporarily low air and water temperatures [27]. Thus, indirect evidence is also taken into account by the law enforcer when detectioning the severe pain and suffering. Summing up the results of the study, let's define its main **conclusions**:

1) the statutory effects of torture are severe pain and suffering, both physical and mental (Article 1 of the 1984 Convention, Article 127 of the Criminal Code of Ukraine), therefore, these effects are included in the subject of evidence in the cases about torture. The "torture syndrome", "breakdown of the person's autonomous self-regulation program" are scientific developments, therefore, their detection is not binding in the context of law enforcement;

2) only the joint medical and legal detection of severe pain and suffering is the key to the correct solution for the issue of presence or absence of the effects of torture. A medical assessment is not self-sufficient, since it does not work for the purpose of law enforcement (it is aimed more at identifying the patient's health problems and assisting him, rather than creating the foundation for qualifying the committed offence). The work of the expert still remains the work of the medical worker; therefore, the conclusions are not always based on the take into account of the peculiarities of legal regulation. In the legal assessment not supported by medical knowledge, the incompleteness and excessive conventionality are always seen;

3) the Istanbul Protocol contains no recommendations regarding the joint medical and legal detection of severe pain and suffering. With consideration of the constitutive nature of the effects of torture, the development of these recommendations is one of the main tasks facing the scientific community;

4) the peculiarity of medical practice on detecting the effects of torture consist of is the need to establish both statutory (severe pain and suffering) and "remote" (physical, psychosomatic and mental) effects of this crime;

5) the specificity of investigative & judicial practice in detecting severe pain and suffering (as effects of torture) lies in the need to use a wide range of tools: a) scientific and legal methods for determination of severe pain and suffering (for example, objective (intensity, duration) and subjective (intolerance) pain assessment criteria); b) medical conclusions on the intensity of pain and suffering; medical documentation on fixation the "remote" effects of torture; c) the conclusions of forensic examinations on identifying the gravity of bodily injuries, psychological and psychiatric examinations on identifying the state of the victim after committing the crime against him; d) testimonies and protocols of interrogation of the victim and witnesses, protocols of inspection of the crime scene, those of search, investigative experiment, examination of material evidence.

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SUMMARY

SEVERE PAIN AND SUFFERING AS EFFECTS OF TORTURE: DETECTION IN MEDICAL AND LEGAL PRACTICE (REVIEW)

¹Tavolzhanska Yu., ¹Grynchak S., ²Pcholkin V., ²Fedosova O.

¹Yaroslav Mudryi National Law University, Kharkiv, Ukraine; ²Kharkiv National University of Internal Affairs, Ukraine

The aim of the study is to identify the features and to determine the relationship between medical and legal (investigative & judicial) practice on detection of the torture effects.

It is emphasized that the paper is a continuation of the thesis study on the criminal law problems of torture, which were prepared by the Department of Criminal Law No. 1, Yaroslav Mudryi National Law University, Kharkiv, Ukraine. During the preparation of this article, the following material were used: the publications issued by the centers for rehabilitation of torture victims, specialized medical journals, manuals for physicians, publications by the IASP and the Ukrainian Association for the Study of Pain, explanations by leading specialists of Bogomolets National Medical University, Kyiv, Ukraine, Danylo Halytsky Lviv National Medical University, Lviv, Ukraine, UN reports, OHCHR official explanations, international treaties on prohibition of torture, criminal codes of post-Soviet countries. The empirical basis of the study was provided by 41 final decisions of the court on torture cases of taken since 2014 till 2019. To achieve the aim of the study the analysis and induction methods, as well as statistical and systemic methods were applied.

According to the results of the study, it is concluded that only the joint medical and legal detection of severe pain and suffering is the key to the correct solution of the issue of presence or absence of the torture effects. It is noted that neither medical nor law enforcement assessments are self-sufficient and require addition of the mutual contexts. Attention is drawn to the fact that development of the guidelines on the joint medical and legal detection of severe pain and suffering is one of the main tasks for the scientific community.

It is proved that the peculiarity of medical practice on detecting the effects of torture consist of is the need to determine both statutory (severe pain and suffering) and "remote" (physical, psychosomatic and mental) effects of this crime. The reasonable arguments are put forward that the specificity of legal (investigative & judicial) practice in detection of severe pain and suffering (as effects of torture) is associated with the need to use a wide range of tools: scientific and legal methods used for determination of severe pain and suffering, medical reports on intensity of pain and suffering, medical documentation on fixation of "remote" effects of torture, reports on forensic, psychological and psychiatric examinations, testimonies and protocols of interrogation of the victim and witnesses, protocols of inspection of crime-committing scene, search, investigative experiment, inspection of material evidence, etc.

Keywords: severe pain, physical suffering, mental suffering, physical effects of the torture, psychosomatic effects of the torture, mental effects of the torture, torture syndrome, person's autonomous self-regulation program.

РЕЗЮМЕ

СИЛЬНАЯ БОЛЬ И СТРАДАНИЯ КАК ПОСЛЕД-СТВИЯ ПЫТКИ: МЕДИКО-ПРАВОВАЯ ПРАКТИКА УСТАНОВЛЕНИЯ (ОБЗОР)

 1 Таволжанская Ю.С., 1 Гринчак С.В., 2 Пчелкин В.Д., 2 Федосова Е.В.

¹Национальный юридический университет им. Ярослава Мудрого, кафедра уголовного права №1, Харьков; ²Харьковский национальный университет внутренних дел, Украина

Цель исследования - определить особенности и взаимосвязь между медицинской и юридической - следственно-судебной, практикой по установлению сильной боли и страданий как последствий пытки.

Исследование посвящено уголовно-правовой проблематике пыток. В ходе исследования использованы публикации центров реабилитации жертв пыток, профильные медицинские журналы, пособия для врачей, публикации Международной ассоциации и Украинской ассоциации по изучению боли, разъяснения ведущих специалистов Национального медицинского университета им. А.А. Богомольца (Киев, Украина), Львовского национального медицинского университета им. Данилы Галицкого (Львов, Украина), сообщения ООН и официальные разъяснения Управления Верховного комиссара ООН по правам человека, международные договора о запрете пыток, уголовные кодексы стран постсоветского пространства. Эмпирической базой исследования явились окончательные судебные решения по делам о применении пыток (n=41), вынесенные в период с 2014 по 2019 гг. Для достижения поставленной цели применены методы анализа, индукции, статистический и системный методы. По результатам исследования сделан вывод о том, что лишь медико-правовое установление сильной боли и страданий является залогом правильного решения вопроса о наличии или отсутствии последствий пытки. Отмечено, что ни медицинская, ни правоприменительная оценки не являются самодостаточными и требуют дополнения взаимными контекстами. Подчеркивается, что разработка методических рекомендаций по медико-правовому установлению сильной боли и страданий является одной из основных задач научного сообщества. Доказано, что особенностью медицинской практики по констатации последствий пытки является необходимость установления как нормативно определенных (сильная боль и страдания), так и «отдаленных» (физические, психосоматические и психические) последствий этого преступления.

Аргументировано, что специфика следственно-судебной практики по констатации сильной боли и страданий как последствий пытки связана с необходимостью использования широкого инструментария: научно-правовых методик по установлению сильной боли и страданий, медицинских заключений о силе боли и страданиях, медицинской документации по фиксации «отдаленных» последствий пытки, заключений судебно-медицинских и психолого-психиатрических экспертиз, показаний и протоколов допроса потерпевшего, свидетелей, протоколов осмотра места совершения преступления, обыска, проведения следственного эксперимента, осмотра вещественных доказательств.

რეზიუმე

ძლიერი ტკივილი და ტანჯვა,როგორც წამების შედეგები: დადგენის სამედიცინო-სამართლებრივი პრაქტიკა (მიმოხილვა)

 1 ი.ტავოლჟანსკაია, 1 ს.გრინჩაკი, 2 გ.პჩოლკინი, 2 გ.ფედოსოვა

¹იაროსლაგ მუდრის სახ. ეროვნული იურიდიული უნივერსიტეტი, სისხლის სამართლის კათედრა №1, ხარკოვი; ²ხარკოვის შინაგან საქმეთა ეროვნული უნივერსიტეტი, უკრაინა

კვლევის მიზნას წარმოადგენდა ძლიერი ტკივილის და ტანჯვის, როგორც წამების შედეგების დადგენა სამედიცინო და იურიდიული (საგამოძიებო და სასამართლო) პრაქტიკებს შორის ურთიერთკავშირის აღმოჩენა და თავისებურებების გამოვლენა. კვლევა ეძღვნება სისხლის სამართლის პრობლემატიკას ძლიერი ტკივილის და ტანჯვის, როგორც წამების შედეგების, დადგენის დროს. კვლევაში გამოყენებულია წამების მსხვერპლთა სარეაბილიტაციო ცენტრების პუბლიკაციები, პროფილური სამედიცინო ჟურნალები, ექიმების დამხმარე სახელმძღვანელოები, ტკივილის შემსწავლელი საერთაშორისო ასოციაციისა და უკრაინული ასოციაციის პუბლიკაციები, ა.ბოგომოლცის სახ. ეროვნული სამედიცინო უნივერსიტეტის (კიევი,უკრაინა),დანილა გალიცკის სახ. ლვოვის ეროვნული სამედიცინო უნივერსიტეტის (ლვოვი, უკრაინა) წამყვანი სპეციალისტების განმარტებები, გაეროს შეტყობინებები, გაეროს ადამიანის უფლებათა უმაღლესი კომისრის სამმართველოს ოფიციალური განმარტებები, საერთაშორისო ხელშეკრულებები წამების აკრძალვის შესახებ, პოსტსაბჭოთა ქვეყნების სისხლის სამართლის კოდექსები. კვლევის ემპირიულ ბაზას წარმოადგენდა 2014-დან 2019 წწ. გამოტანილი

41 საბოლოო სასამართლო გადაწყვეტილება წამების გამოყენების საქმეებზე. დასახული მიზნის მისაღწევად გამოყენებულია ანალიზის, ინდუქციის, სტატისტიკური და სისტემური მეთოდები.

კვლევის შედეგების მიხედვით გამოტანილია დასკვნა იმის შესახებ, რომ მხოლოდ ძლიერი ტკივილისა და ტანჯვის სამედიცინო-სამართლებრივი დადგენა არის წამების შედეგების არსებობის ან არარსებობის შესახებ საკითხის სწორი გადაწყვეტის საწინდარი. აღნიშნულია, რომ არც სამედიცინო, არც სამართლებრივი შეფასება არ არის თვითკმარი და მოითხოვს ურთიერთ კონტექსტებით დამატებებს. ყურადღება გამახვილებულია, რომ ძლიერი ტკივილისა და ტანჯვის სამედიცინოსამართლებრივი დადგენის მეთოდიკური რეკომენდაციების შემუშავება წარმოადგენს ერთ-ერთ ძირითად ამოცანას სამეცნიერო საზოგადოებისთვის.

დამტკიცებულია,რომ წამების შედეგების კონსტატაციის სამედიცინო პრაქტიკის თავისებურებას წარმოადგენს ამ დანაშაულის, როგორც ნორმატიულად განსაზღვრული (ძლიერი ტკივილი და ტანჯვა), ასევე "შორეული" (ფიზიკური, ფსიქოსომატური და ფსიქიკური) შედეგების დადგენა. არგუმენტირებულია, რომ ძლიერი ტკივილისა და ტანჯვის, როგორც წამების შედეგების, კონსტატაციის საგამოძიებო და სასამართლო პრაქტიკის სპეციფიკა დაკავშირებულია ფართო სპექტრის ინსტრუმენტების გამოყენების საჭიროებასთან: ძლიერი ტკივილისა და ტანჯვის დადგენის სამეცნიერო-სამართლებრივი მეთოდიკა, სამედიცინო დასკვნები ტკივილისა და ტანჯვის სიძლიერის შესა-ხებ, წამების "შორეული" შედეგების ფიქსაციის სამედიცინო დოკუმენტაცია, სასამართლო-სამედიცინო ფსიქოლოგიურ-ფსიქიატრიული ექსპერტიზების დასკვნები, დაზარალებულის, მოწმეების დაკითხვის ოქმები და ჩვენებები, ჩადენილი დანაშაულის ადგილის დათვალიერების, ჩხრეკის, საგამოძიებო ექსპერიმენტის ჩატარების, ნივთიერი მტკიცებულების დათვალიერების ოქმები.

DISTRIBUTION OF SEX HORMONES AND LYMPHOCYTES IN REPRODUCTIVE WOMAN WITH THYROID PAPILLARY CARCINOMA AND HASHIMOTO'S THYROIDITIS

Muzashvili T., Kepuladze Sh., Gachechiladze M., Burkadze G.

Tbilisi State Medical University, Georgia

The incidence of papillary thyroid carcinoma is increasing around the world [11]. During last years the incidence of thyroid carcinoma has been increased to 16.3% per 100.000 women. It also represents the fifth most common cause of cancer mortality amongst women [1]. In Georgia, thyroid carcinoma moved from 20th place to 2nd place according to the data of national cancer registry. It is recorded in all age groups and unfortunately it represents the number one malignancy in puberty age girls [8]. The reason for increased incidence is unknown.

Papillary thyroid cancer is the most common subtype of thyroid carcinoma [5]. Its incidence is markedly higher in women compared to men and the female male ratio represents 4:1 [5].

The causative factor of papillary thyroid carcinoma is unknown. However, familial adenomatous polyposis [1], Gardner's disease [9] Cowden disease [7] and Carney complex I [2] spotty skin pigmentation, and endocrine overactivity (of the adrenal, the pituitary, and the testis are considered as pathogenic factors. One of the causes of the development of papillary thyroid carcinoma might be Hashimoto's thyroiditis. However, this association is not very well studied. Although, there are number of pathologies associated with papillary thyroid carcinoma, the most frequently the association with Hashimoto's thyroiditis has been seen [3]. Hashimoto's thyroiditis represents the autoimmune disease, which is mediated by organ-specific T lymphocytes. It is characterised with the presence of lymphoid infiltrate,