

Assessment and litigation of ocular injuries by less-lethal weapons.

Pau Pérez-Sales¹, Sara López Martín² and Marina Parras Cordovés³

1 Clinical Director SiRa Center. Hospital La Paz Editor-in-Chief Torture Journal.

2 Senior Legal Adviser. SiRa Center.

3 MD. SiRa Center. Emergency Department, Hospital Universitario Infanta Sofia.

Abstract

Introduction: Ocular injuries by less-lethal weapon have had an epidemic prevalence in some countries in the last decade. Unfortunately very few cases are litigated and victims do not get neither justice nor reparation and rehabilitation. *Method:* We review the difficulties and provide suggestions based on the experience of the authors' of the papers in the Special Section of Torture Journal and the experience of the SiR[a] center. *Results:* We review the specific and complex conditions for litigation and strategic litigation, and possible options for human rights organisations, with an emphasis on the challenges of collecting evidence during and after the injury event. We then review the medical and psychiatric assessment based on the Istanbul Protocol, including detailed guidance and practical advice on the ophthalmological, medical, psychological, psychometric and psychosocial aspects. *Conclusions:* In the road to the banning of less-lethal weapons, advocacy work and justice for victims, we need better planning and strategy and further efforts in forensic documentation and litigation. The networks of survivor's organisation are an example of how also anti-torture centers can cooperate in this regard.

Introduction

The main cause of serious ophthalmological injuries, including violent eye amputations in the context of so-called less lethal weapons, is the use of blunt objects, such as batons or extendable sticks and the use of kinetic energy projectiles (rubber bullets, pellets, foam projectiles or others). Such injuries in the context of population control have been considered to constitute cruel, inhuman or degrading treatment or even torture when they are carried out, intentionally, by State officials (or with their acquiescence or protection) and involve any of the purposes contemplated in the Convention against Torture. Due to their special characteristics, they constitute rights violations that entail unique difficulties and complexity from both a legal and forensic point of view. This paper addresses some of these difficulties with practical legal and forensic recommendations.

It is structured in three parts: First, legal, where we consider legal difficulties and provide suggestions on elements for obtaining evidence are given. Second, medico-psychological and forensic, where we review the elements to be considered in the

interview, the medical and ophthalmological evaluation, and the psychometric, psychological and psychiatric evaluation. Third, with reflections on moral, ethical and political dilemmas, and questions for policy-makers.

Part 1: Legal considerations for evidencing and litigating ocular injuries by less-lethal weapons

Eye mutilations constitute severe forms of bodily and psychological harm associated with experiences of ill-treatment or torture, both in custodial and non-custodial settings. Despite this, and as reflected in the experiences of different countries in this issue of *Torture*, very few and almost anecdotal cases are prosecuted, given the magnitude of the phenomenon.

There are generally two paths for legal proceeding: criminal complaints against the responsible State agents or institution,¹

1 In such cases, the institution, or the body to which it belongs, is not liable on the facts. It is the State as a whole that is vicariously liable in the event that the victim is compensated.

and administrative claims for compensation against the State (under different causes of action depending on the country). In both types of case, lawsuits can constitute strategic litigation to promote policy or legislative changes.

Strategic litigation requires [1] an analysis of the context (a sociological understanding that society is ready for change), [2] the political moment (a correlation of forces that is conducive to change) and the [3] feasibility of change. Sometimes, it is more practical to litigate small changes (such as a change in regulations) that constitute new steps towards an ultimate goal (i.e. the prohibition of less lethal weapons). Strategic litigation must often respond to ‘windows of opportunity’ (Kingdon, 1995). But it is always necessary to assess the impact of an unfavourable ruling, which creates jurisprudence in the opposite direction to that pursued by the litigation.

The legal view: difficulties in litigation and possible options

Let us first address some reasons that help to understand the low number of cases that are dealt with by legal means, and some possible strategies that will be of greater or lesser applicability depending on the Court concerned and the national and international context in which they occur.

1. Inadequacy of the criminal offence.

As repeatedly made clear by the different bodies and institutions responsible for interpreting the Convention against Torture, the scope of police actions on persons not in custody (non-custodial settings) would be subject to the same legislative framework as in custodial contexts.²

However, this consideration in the international legal system is not reflected in national ones, where, on the one hand, *cruel, inhuman or degrading treatment* is not usually criminalised as such, and on the other hand, there are a multitude of criminal offences (crimes of injury, unlawful coercion, excessive

use of force or others, with or without an intentional component) that do not fall within the criminal offence of torture. The decision relates to what the legislator considers in each case the “protected legal right” - which can range from the right to physical integrity, freedom, dignity, moral integrity, the correct exercise of public functions, or others-.

This discrepancy suggests several lines for legislative-jurisprudential progress: (a) institutional and political lobbying actions to adjust the legal definitions of ill-treatment or torture to include situations of persons who are not in custody, (b) strategic litigation actions to generate jurisprudence at national or regional level on the consideration of situations of police abuse in non-custodial contexts and especially in the framework of assemblies, (c) complaints to committees of the United Nations Human Rights system to obtain resolutions urging the adaptation of legislation to guarantee victims “effective remedies and reparation”.

2. The burden of proof and international obligations of States in this area.

Another critical reason preventing further litigation of cases is the failure of authorities to cooperate in establishing accountability. Multiple examples are described in the case studies presented in this Special Section of *Torture*: Prosecutorial inactivity or premature closure of cases (Chile³); criminalisation of related offences (Spain, Colombia, South Africa); failure to secure testimony from the injured (South Africa, Spain), corporatism (or vested interests) of law enforcement agencies that do not provide information even under judicial request (South Africa, Colombia, Chile, Spain), tendency of judges to dismiss on the grounds that the victim voluntarily exposed themselves to the possibility of being injured in such a way and to assume the absence of malice (Spain, Colombia).

The Convention against Torture (Articles 2 and 12) obliges States to investigate, ex officio, situations in which there is suspicion of the commission of torture or ill-treatment.⁴ In the same vein, the major regional human rights courts have made numerous judgments against States for failures to promptly and impartially investigate allegations of torture,⁵ including the

2 Commission on Human Rights: “Question of the human rights of all persons subjected to any form of detention or imprisonment, in particular: torture and other cruel, inhuman or degrading treatment or punishment”, 10 January 1997, E/CN.4/1997/7, paras. 122-123; Human Rights Council: “The promotion and protection of human rights in the context of peaceful protests”, 11 April 2014, A/HRC/RES/25/38, par.2; Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, Juan E. Méndez: “Mission to the Gambia”, 16 March 2015, A/HRC/28/68/Add.4, par. 27; Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment: “Extra-custodial use of force and the prohibition of torture and other cruel, inhuman or degrading treatment or punishment”, 20 July 2017, A/72/178, paras- 34-36 and 62;

3 In Chile, the main reason for the closure of cases by the Prosecutor’s Office is the “abandonment of the legal action by the victim”, a euphemistic legal formula used to say that the victim was not able to provide sufficient evidence under the prosecutors opinion.

4 Article 12: “Each State Party shall ensure that, wherever there is reasonable ground to believe that an act of torture has been committed within its jurisdiction, the competent authorities proceed to a prompt and impartial investigation.

5 In the European Court of Human Rights, the ECHR has

European Court of Human Rights⁶ and the Inter-American Court of Human Rights.⁷ However, most States consider that there is a tension between this mandate and the right of police officers to be presumed innocent. This tension is not real, as the proper investigation of the facts should be seen as a protective element for officer themselves.

3. Identification of the perpetrator.

A particularly relevant element to initiate criminal proceedings in some jurisdictions is the obligation of the victim to identify the specific officer who fired the shot(s) that caused the injury. In many countries, officers are not identified by their uniform with their name or professional number, or the number is illegible in size. Even if there is an identification obligation, officers often hide or conceal their ID badges during operations. As the case studies discussed below show, this limitation, together with the corporatism of the police mentioned above, has prevented criminal prosecutions in, for example, South Africa, Spain⁸ or Colombia.

The obligation of a prompt and impartial investigation established by the Convention implies, de facto, that the investigating judge must issue an order to the law-enforcement authority to be informed of the perpetrator's identity or to be provided with information conducive to that determination. Furthermore, the United Nations statute of the victim⁹ and

General Comment No. 3 of the Committee against Torture¹⁰ clearly state that a person can be a victim of torture regardless of whether the perpetrator is identified.

In the specific case of eye injuries, human rights organisations (Amnesty International & Omega Research, 2023; Velasquez et al., 2022) have proposed a number of measures that can facilitate compliance with the duty to investigate and on which civil society could advocate. The most important of these is the existence of national protocols that will allow for the investigation of situations in which serious incidents of use of force by State security forces occur. This would imply, at the very least, the existence of **detailed reporting forms** to be completed by each of the officers involved in an incident, including at the very least:

- Estimated distance between agent and target at the time of firing, including graphic representations of the scene (sketches).
- Precise identification by the officer of the ammunition used.
- Number of shots fired and the reason for them.
- The area targeted and justification if another area was hit.
- Injuries caused and assistance given to the citizen.

Such forms should be completed ex officio within 24 hours and be accessible to the parties in legal proceedings. This report would guarantee both the officer and the citizen, allowing for an internal investigation, external documentation and triangulation of information between different statements and sources, even months after the event, avoiding distortions of memory, or otherwise.

4. The distinction between lawful use of force and ill-treatment or torture.

There is precise guidance from UN bodies¹¹ indicating when intervention in the context of demonstrations could constitute ill-treatment or torture. To be in accordance with the law, any intervention by law enforcement agents must respect the principles of legality, necessity, proportionality, precaution, and non-discrimination, and “with due regard to the freedoms of assembly and expression”.¹²

cited *Assenov and Others v. Bulgaria*, App. No. 24760/94, 28/10/1998, § 102; *El-Masri v. The Former Yugoslav Republic of Macedonia*, App. No. 39630/09, 13/12/2012 § 182; *Arratibel Garcíandia v. Spain*, App. No. 58488/13, 5/5/ 2015, § 35. In the Inter-American Court of Human Rights, it is worth mentioning the *Case of Tibi v. Ecuador. Preliminary Objections, Merits, Reparations and Costs. Judgment of 7 September 2004. Series C No. 114, § 159* or *Case of J. v. Peru. Preliminary Objections, Merits, Reparations and Costs. Judgment of 27 November 2013. Series C No. 275, § 375* o *Case of Maldonado Vargas et al. v. Chile. Merits, Reparations and Costs. Judgment of 2 September 2015. Series C No. 300, §§ 75-76.*

6 The most recent are *SSTEDH MG v. Lithuania*, App. No. 6406/21, 20/02/2024, § 129 or *Al-Hawsawi v. Lithuania*, App. No. 6383/17, 16/01/2024, § 196

7 I/A Court H.R., *Case of the Miguel Castro Castro Prison v. Peru. Case of the Miguel Castro Castro Prison v. Peru. Merits, Reparations and Costs. Judgment of 25 November 2006. Series C No. 160, § 344; Case of Ríos et al. v. Venezuela. Preliminary Objections, Merits, Reparations and Costs. Judgment of 28 January 2009. Series C No. 194, § 331.*

8 *STEDH López Martínez v Spain*, App. N° 32897/16, 9/03/2021, §§ 37-38 : <https://hudoc.echr.coe.int/?i=001-208362>

9 Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, 29 November 1985, art. 2.

10 Committee against Torture, General Comment No. 3, Implementation of article 14 by States parties, art. 3.

11 Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment: *A/72/178, cited*. Par. 46. Office Of the United Nations High Commissioner For Human Rights (2017): Resource book on the use of force and firearms in law enforcement , par. 1.3, p. 12; UN High Commissioner for Human Rights (2021). UN Human Rights Guidance on the Use of Less Lethal Weapons in Law Enforcement, par. 2.

12 Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment: *A/72/178, cited*. Par. 15.

In practice, lawful use of less lethal weapons requires the State to prove that:

- There was an imminent threat of injury to citizens or law enforcement personnel.¹³
- The officers tried to resolve the situation by less harmful means and opted for the use of less lethal weapons when all options had been exhausted.¹⁴
- The intervention followed the regulations on using weapons, which should be public and accessible to all parties.¹⁵
- The existence of a clear chain of command and hierarchical orders that indicated to the officers what they should do at any given moment without giving rise to ambivalence or confusion.¹⁶
- Use of force was not specifically directed against any group based on discrimination.¹⁷

To this end, in addition to the detailed reporting outlined above, it would be helpful to establish systems for recording all situations in which less lethal weapons are used, allowing for global statistics on use, detecting anomalous situations, documenting consequences in terms of injuries or deaths, and modifying protocols accordingly (Amnesty International & Omega Research, 2023; Velasquez et al., 2022). This register would be independent of the existence of civil society monitoring systems or independent oversight bodies created by the State itself, with the capacity to review incidents (Amnesty International & Omega Research, 2023; Velasquez et al., 2022).

Such reports would open up another possible avenue of investigation, argumentation and substantiation for litigation cases: analysing, before the Court, the legitimacy, necessity, proportionality, precaution, respect for the right to assembly and non-discriminatory nature of the intervention that caused the eye injury.

13 UN High Commissioner for Human Rights (2021). UN human rights guidance on the use of less lethal weapons in policing.

14 Human Rights Committee (2018): General Comment No. 36 on article 6 of the International Covenant on Civil and Political Rights, on the right to life, par. 14

15 The regulations establish the type of weapon and certifications required, the types of projectiles (diameter, density, material). It also establishes the operating procedures depending on the projectile, including, among other aspects, the minimum and maximum shooting distance, the areas of the body at which they can be aimed (lower limbs and lower abdomen, and only for justified reasons other areas), shooting position (never from elevated positions or from the air).

16 Office Of the United Nations High Commissioner for Human Rights (2017): Resource book..., *cited*, pages 16 and 78

17 UN High Commissioner for Human Rights (2021). UN Guidance... *cited*, par. 2.11. UN General Assembly (1979): Code of Conduct for Law Enforcement Officials, art. 2.

5. Value of forensic evidence.

Another critical barrier to litigation is the feasibility of forensic evidence and the value attached to it. Concerning feasibility, it has been pointed out in different contexts (see Chile and Colombia in this same Special Section) how forensic institutes collapsed in the face of the avalanche of cases of eye injuries over recent years, causing the victims to be summoned for a first evaluation up to more than a year after the events, and that in most cases the Court was informed of the impossibility of carrying out an expert assessment based on the Istanbul Protocol. Additional resources should be provided when such situations occur, to comply with international obligations. Time is an essential element, linked not only to proper determination of facts, but also to advancing rehabilitation and reparation measures in due time.

The matter also turns on how different legal systems consider party expert evidence as contrasted with official expert evidence. Even though the Istanbul Protocol itself, some national legislations (e.g. Mexico) and a number of treaty bodies and UN experts¹⁸ have indicated that the same evidential value should be given to party expert opinions as to official expert opinions, in some jurisdictions, only official reports are accepted by the Court. Rather, evidence should be considered based on the curriculum vitae and the experts' specific subject matter expertise. This consideration should be granted in the case of civil society organisations that are part of international networks of care for victims of torture and are properly accredited as experts in the field.

There is enormous variation between States' legal frameworks for forensic evidence, such as:

- a. States where only official forensic institutions (Institutes of Forensic Medicine, Forensic Medical Services or others) are allowed to issue opinions¹⁹.
- b. States in which adversarial action is allowed through independent expert evidence commissioned by organisations specialised in the field, or directly by the victim.²⁰
- c. Contexts where the evaluation is required to be in line with the Istanbul Protocol, others where local adaptations of the

18 Human Rights Council : Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, Juan E. Méndez, 18 January 2012, A/HRC/19/61,

19 In turn, these institutions are sometimes independent bodies of the state, while in others they are attached to the same ministry or institution that may be responsible for the abuses, breaking the principle of forensic independence.

20 These in turn can have different levels of legitimacy. In some systems they are given the function of auxiliary to official expertise, in others they are given a lesser subsidiary value, and in others they are given equal evidentiary weight depending on the expertise and credentials of the experts.

Protocol exist, and still others where other reporting models exist that do not meet the ethical and research standards of the Protocol.

This opens the way for civil society and human rights organisations to work towards making forensic medicine institutions independent in both institutional and budgetary terms and to ensure that the value of forensic expertise carried out by independent human rights institutions and experienced party forensic experts is enshrined in law.

6. The investigator of facts.

Similarly, there are variations concerning the entity in charge of investigating the facts, between States in which the burden of investigation falls on the inspection systems of the police institution itself - in violation of the principle of independence -, on external police monitoring institutions - with legitimacy to receive complaints, but not to investigate them, or only until a criminal proceeding is initiated - or on criminal investigators (sometimes even military courts).

Again, there is fruitful advocacy to be done on pushing for monitoring independent from the law-enforcement agency, increasing transparency and impartiality, on the understanding that this is not incompatible with internal inspection systems. Both have different and important purposes.

7. Difficulties from the judicial process itself.

Finally, the experience in different States reveal problems inherent to the dysfunction of the judicial system itself, among which the following stand out:

- Very long procedural times (sometimes decades), when victims of eye injuries require immediate assistance in terms of recognition, rehabilitation and reparation.
- The need for resources to finance the legal proceedings, which only in the end, if the case is won, can be reimbursed. This is especially relevant in contexts where employment, education or work is often lost as a consequence of the disability caused by the injury.

In this sense, the forms of self-organisation of the victims, the associative spaces that allow fundraising, agreements with institutions and teams of professionals, and the actions of donors and organisations that support strategic litigation cases (see below) are essential.

8. Administrative claims: demands for reparation, including financial compensation.

If the legal process is linked to an administrative demand for reparation, there are additional difficulties in assessing and quantifying the damage caused. Very few States have adopted nation-

al Damage Assessment scales that provide guidelines on how to quantify compensations for disability due to State actions. In Europe, for example, the “*European Scale Guide for the Assessment of Physical and Mental Injuries*”²¹ has not been adopted, despite numerous drafts and discussions²².

Collecting evidence

To successfully prosecute cases, it is essential to consider the collection of evidence. This is the subject of the following section. Two situations are relevant: evidence collected on the spot and the collection of ex post facto evidence.

1. Collection of real-time evidence.

In those expressions of civil society where repressive actions may eventually occur, planning for their monitoring is essential. The details of how to organise monitoring actions are beyond the scope of this paper, but it is relevant to consider the following points:²³

- **Training:** Have people trained in real-time documentation of human rights violations who can take photographs or video recordings of the actions, with particular emphasis on the identification of the agents responsible (surnames, initials or badge numbers, faces, full body photographs that identify peculiarities in the way they dress or behave). The recordings will make it possible to document the sequence of events. This is especially relevant for the forensic determination of (a) the interaction between the population and the security forces, to assess the necessity and proportionality of the intervention, (b) compliance with protocols and rules for the

21 <https://www.europarl.europa.eu/meetdocs/committees/juri/20040223/505310EN.pdf>

22 In many countries, the Guidelines used are designed for work or traffic accidents. They do not consider, therefore, injuries and sequelae generated by intentional actions (malicious), which are very different in nature from accidental ones (reckless). Furthermore, they usually do not contemplate the concept of “non-material damage”, damage not linked to a physical injury, they do not take into account the medical, psychological-psychiatric, social, etc., background of the victim and the assessment of the psychological-psychiatric impacts are not in line with the impacts included in the DSM-V or ICD-11, giving scarce weight to psychiatric sequelae. The need to advocate for proper compensation scales is an important point to be considered by human right organization working with survivors of eye mutilation and other physical injuries.

23 Detailed guides can be found at <https://prt.civicus.org/>; <https://irct.org/protesttoolkit/>; <https://www.greenpeace.org/usa/toolkits/protest-safety-tips-from-greenpeace/>

use of less-lethal weapons, (c) impacts, and as support in the medical examination and determination of injuries, (d) detection of possible situations of intentional punitive use of force, (e) identification of the type and model of weapon used, and (f) identification of evidentiary elements that can be claimed later in Court (e.g. existence of body cameras).

- The training of the observers will allow (a) to obtain stable images, avoiding sudden movements or changes of the plane, (b) to remain silent or with minimal commentary during the recording, allowing the ambient sound to be recorded, (c) to immediately upload videos and photographs as captured to a secure server, (d) not to manipulate or edit images, maintaining a correct chain of custody of evidentiary elements, (e) to disseminate on social networks as soon as possible.
- **Ballistic evidence:** Photograph the projectiles used for subsequent correct identification. Sometimes it might be useful to collect those that may be relevant, using gloves and wrapping them in paper or bags to avoid contamination and at a time when the time and place of collection can be identified, although there is a risk that they can latter be considered as contaminated probes and rejected during the legal process.
- **In case of injuries:** save all clothing with any tears, injury marks or traces of blood. Preserve in bags to avoid contamination and maintain the chain of custody until it can be handed over to forensic authorities.
- Take photos of all injuries, with at least one or two full-length photos. Add notes, if possible, of the person's symptoms. It is preferable to take many pictures from different angles, in natural light and with an object (ideally, a ruler) that allows the size of the lesions to be appreciated.
- Ask for detailed reports from the health centres or hospitals where the victim has been treated. Request that the report conforms to a forensically valid template. The doctor or para-

medic should ideally include what is shown in Table 1. The lawyer can help the victim to request a legally valid injury report from the health centre.

- **Witnesses:** Witnesses who have seen the events should be able to explain or write a detailed account of the events, including places, times, surroundings, position of people, and how the officers acted. Draw sketches if possible. Do not be influenced by other people's accounts; describe only what you have seen and experienced.
 - Identify witnesses to the events and ask for their names and telephone numbers, to give their account or testify about what they have seen.
2. **Collection of evidence after the events.**
- **Videos and photographs:** Analyse the possible location of security cameras in streets, shops, bank offices, and other places along the demonstration route and at the scene. They can be obtained from the owners of the establishments, but in this case, it would be desirable to have a notarised record of their removal, certifying that they have not been tampered with. Alternatively, request them as urgent proceedings from the Court, so that they are not erased. Make appeals through social networks to locate recordings made by individuals who were, at the time, either participating or watching from the pavement or balconies.
 - **Witnesses:** Try to locate witnesses to the incident through posters in the area (bus stops, shops, staircases of neighbours) or social networks.
 - **Photographic expert reports:** Various human rights organisations, such as Forensic Architecture²⁴ and others, have been developing expert photographic strategies to reconstruct events and eventually identify elements such as the van in which the riot police unit was travelling (model, plate, etc.), the officer who fired the shot based on clothing, physical features etc., the type of weapon used, and others, by integrating diverse visual sources.
 - **Request proceedings** from the court or the prosecutor's office (depending on the investigation system in the country). Attorneys can request a wide range of evidence. Much will depend on the context and the State, but if available, evidence to be considered includes:

Table 1. Elements of an injury report following the Istanbul Protocol. Short guideline for lawyers.

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- The account of the facts (in the aspects most relevant to the medical examination) in the person's own words, specifying, if possible, the place of the examination.
 - The medical examination should be complete and not only describing the external lesions.
 - Basic description of psychological symptoms.
 - Diagnosis.
 - Whether there is consistency between the account of events and the injuries and diagnoses observed. Strongly advisable for legal purposes but not compulsory if the health worker does not feel qualified to do it.
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²⁴ See, for example <https://forensic-architecture.org/investigation/tear-gas-in-plaza-de-la-dignidad>; <https://forensic-architecture.org/investigation/police-brutality-at-the-black-lives-matter-protests>.

- Identification of police units involved on the day of the event and their distribution in the physical space of intervention.
- Identification of officers carrying less-lethal weaponry, distribution and warrants (intercom recordings or other).
- Inventory of ammunition expended on the day for each unit.
- Traceability data for the ammunition.
- Body camera recordings, if available. Identification of officers who did not wear a camera or did not record.
- Dynamic reconstruction of events.
- Witness location and testimony at a court of law.
- Finally, call for an investigation by independent bodies, particularly the country's National Preventive Mechanism.

Within this body of evidence collected in real time and after the fact, a forensic evaluation of the victim of an eye injury conducted according to the Istanbul Protocol is especially important. This is the subject of the second part of this text.

Part 2: Medico-legal considerations for forensic evaluation of ocular injuries.

Psycho-legal approach

The Istanbul Protocol details a number of ethical principles and interview considerations, especially in chapter four, which need not be reproduced here, but are fully applicable. However, we would like to emphasise some aspects not included in the Protocol, which are very relevant in this context and have to do with a psycho-legal approach.

1. Accompanying the survivor.

We speak of a psycho-legal approach as a work of accompaniment for the person who has suffered a violation of rights throughout the legal process. The accompaniment begins from the moment when the possibility of a complaint is raised, and requires accurate and unbiased information about the risks and benefits, to the collection of evidence that can support the case; to the process of elaborating, with the lawyer or organisation, the legal strategy; to the preparation of expert statements and documentation of impacts, through to the accompaniment at different procedural moments; and the psychological support offered during the trial and the subsequent work of evaluation. It is essential to bear in mind that any complaint of torture or ill-treatment can take years to investigate and prosecute.

2. The right time to assess.

Within this framework, it is crucial to assess the ideal time for conducting the forensic assessment, bearing in mind that, in any case, there should be a systematic collection of all medical or psychological evidence of the injury to the victim as and when it arises. Criteria for deciding the best time for the assessment include:

- I. The person has reached a point of recovery that allows the assessment to be carried out, without a risk of serious re-traumatisation.
- II. Enough time has passed to have an overview of the impacts and after-effects of the injury. An assessment made prematurely will not reveal the functional implications, the damage to the identity and life project of the victim, the permanent aesthetic consequences or other essential elements of the assessment.
- III. Proximity to key dates in the judicial process. If the assessment has been carried out too far in advance, it will be necessary to carry out periodic updates to see the evolution of

Table 2. *Elements of psycho-legal accompaniment*

- Bridge the legal, medical, and colloquial languages and help the victim understand the process, be in control of the process, and be the essential decision-maker.
- Discuss the steps of the legal process with the victim. If strategic litigation is chosen, ensure the victim understands what is at stake.
- Prepare the victim to face the press or interviews with people from the administration or possibly politicians.
- Ensure a realistic perspective and work so that the restorative power of legal action lies in the very fact of carrying it out and in the effort that this means in terms of visibility and denunciation, not in the eventual positive or adverse sentence or in the amount of compensation that may be obtained.
- Accompany the victim in making a statement and dealing with subsequent news reports. Prevent possible harm when faced with contradictory or inaccurate versions from police officers or witnesses provided by the police, statements from political officials denying the facts, or accusations of lack of credibility, or pursuit of economic interest and spurious motives. Be prepared for press or social media reports in which the victim is attacked or insulted, or forensic evaluations that do not include relevant elements of their suffering and experience. All these adverse events can have a traumatic psychological impact, and psycho-legal accompaniment seeks to transform them into elements of empowerment and self-confidence.

the symptoms, the sequelae and the current condition of the victim.

IV. Access to all relevant evidentiary information that may assist the expert in their work: photographs, video recordings, emergency reports, witness statements and others.

Whether the organisation or the experts who carry out the Istanbul Protocol assessment should assume the tasks of psycho-legal accompaniment as part of a comprehensive approach to care for the victim is debatable. While this continuity of action is in the victim's best interest, in some judicial instances, it may be considered that this would call into question the expert's independence. Table 2 summarises some critical aspects of psycho-legal support in eye injury cases.

3. Social movements for victims

Part of the accompaniment is also to support and strengthen the organisational processes generated by the victims themselves. This issue's Special Section presents some examples and testimonies from organisations such as 'Movimiento en Resistencia Contra las Agresiones Oculares del Escuadrón Móvil Antidisturbios' (MOCAO) and Temblores (Colombia) and STOP Bales de Goma and Ull per Ull (Spain).

From the point of view of the legal process, there are some relevant considerations for lawyers litigating cases and accompanying entities:

- The existence of an active social movement that supports the claim and has contacts with the press and the media can be decisive elements of support for the victim. They can also play an essential role in pushing for a judicial resolution.
- Such actions need to be coordinated and, as far as possible, aligned with the advocates' strategy. For example, an overly aggressive social mobilisation strategy at inappropriate times can have very adverse effects by generating the idea that those who were injured may represent radicalised, extremist elements, and thus support the idea that it is the victim's responsibility they were injured, and not that of law enforcement. Social pressure is not always positive in legal terms.
- The strategy should emphasise principles relevant to a human rights environment, emphasising values of justice, solidarity and non-violence over claims of outrage or revenge, which, while legitimate, may generate adverse feelings in decision-makers and those who can promote legislative or political change. Confrontation is not usually the best lever for change.
- Messages should emphasise the principles of *empathy* with victims, *urgency* to prevent further cases and *timeliness in the sense of* introducing the idea that now is the time to do it.
- At the same time, the forensic team must maintain absolute independence from these social movements. They should

not make public statements outside the courtroom or participate in events with victims, in order to maintain the ethical requirement of independence.

4. Istanbul Protocol

In cases of ocular injury, it is advisable to try, as far as possible, to make the Istanbul Protocol multidisciplinary, given the complexity of everything that needs to be assessed, including, as appropriate, and as far as possible:

- Medical report, assessing the general situation of the victim before and after the event and a detailed examination by medical staff.
- An ophthalmological report, detailing the acute impacts, the possible causal mechanism and the analysis of consistency between this and the injuries. In this regard, the ophthalmologist can make ballistic considerations regarding the nature of the object, velocity, force and direction of impact to justify the causal relationship.
- Traumatological and surgical parts, detailing the different reconstruction processes in the ophthalmological and aesthetic areas.
- The psychological-psychiatric part includes acute impacts, a description of the adaptation process, and chronic psychological and psychiatric impacts.
- A psychosocial part, with an analysis of the impacts on each area of daily life.
- The rehabilitation part will include an analysis of the subsequent adaptation and reconstruction processes of the victim's life project.

As is evident, and as the Istanbul protocol indicates, it is not necessary to have all of these professionals available to carry out the assessment. Any professional can try to cover some or all of these aspects if there is no real possibility of other professionals doing so. To this end, the following should be considered:

4.1. Information gathered in the interview.

In the initial interview, it is essential to collect two parts:

- Collect the complete psychosocial history, including all identity aspects of the person's life (childhood, family, studies, work, friendships, community life, etc.), to compare it with the later situation.
- A detailed account of the facts, including aspects that assist in obtaining evidence and determining causal elements (see the legal part above). In this regard, it is important to remember that victims often have confused or fragmented memories in cases of ocular injuries. In this case, the expert needs to explain the causes (Table 3).

Table 3. Causes of inconsistencies in ocular injuries**Inconsistencies in the narrative**

Overall, there is inevitably tumult and confusion in the context of the events.

Speed of the events and difficulty in identifying the point of exit of the projectile, especially when the projectile is not frontal and within the field of action of the victim.

Disorientation in time and space as a consequence of acute impact.

Neuropsychiatric damage, secondary to traumatic brain injury.

Inability to see, as a result of injury or measures to stop bleeding.

Confusion, in the following days, of one's account with the account of other victims.

Giving specific details referred to by relatives or friends, but in reality, the person could not grasp, subsequently entering into contradictions.

Fear of being denounced based on the facts (e.g. participation in riots, aggression against officials, destruction of public property or even participation in "terrorist" acts).

Fear of involving other people.

Inconsistency of symptoms

The problems generated by eye loss are often complex to explain, because they involve subtle elements of daily life that require much systematisation.

To this are added general elements linked to:

Highly directive or symptom-oriented medical or ophthalmological interviews, that provoke re-experiencing and cognitive avoidance. This psychological distress can lead to a superficial and confusing narrative.

The presence of police inside the doctor's or ophthalmologist's office in the first emergency care.

Initial assessment by police-linked emergency services that lack independent reporting. Negative transfer or counter-transfer reactions.

4.2. Elements of interview support.

The Istanbul Protocol gives numerous tips and guidelines to maximise confidence and minimise the risk of re-traumatisation during interviews. They are of particular relevance in the assessment eye injuries by less lethal weapons:

- Remind the person that a detailed account of events is essential for proper medical and psychological examination. Moreover, a detailed account facilitates the expression of traumatic experiences in line with the principles of witness therapy and other evidence-based approaches, that combine forensic assessment with psychological support in extreme trauma.
- Try to place the events in the overall picture of what happened. If the person can draw what was happening, what they did and the subsequent events, let them try to do so. If they cannot do so, help them by drawing a sketch or sketch on a blackboard under their instructions. Once the expert considers it a faithful reflection of the facts, take a photograph that can be included as an annex to the expert's report.
- In cases where there are confusing accounts or particular difficulties in remembering, a reconstruction of the events should be considered for memory stimulation and therapeutic process. This reconstruction must be carried out with the

utmost care to prevent harm (do-no-harm principles) and assess the person's psychological state.

An example can be seen in the attached photographs (see Figure 1). In this case, the victim suffered eye injury, as a result of being hit with an extendable police baton when the police were opening the door of his home. The police claimed that he had caused the injury himself with a piece of iron while trying to block the door to prevent them from entering.

It was decisive: (a) to show that the injuries were consistent with the impact of a police baton and not with an iron prop, (b) to show in the reconstruction of events that there was no material physical space for the victim to have self-injured, as the police claimed. The reconstruction also helped the victim to remember the events and allowed for therapeutic work with traumatic emotions and memories.

4.3. Medical and ophthalmological evaluation**4.3.1. General medical assessment.**

Before assessing eye trauma, a general medical examination must be carried out. The aim is to perform an overall and systematic assessment of damage by organs and apparatus to detect other injuries or sequelae that may have gone unnoticed, even by the

Figure 1. Role playing by a the survivor of the circumstances of the aggression by police officers as part of the forensic assessment.



The Role-Playing had the double purpose of (a) sustaining the report by mapping circumstantial elements and (b) doing a prolonged therapeutic intervention by clarification and working with emotions of sadness and guilt.

Table 4. General medical examination

- Description of the patient's general condition. Subjective perception of their well-being (how do they feel?). Describe whether the patient is conscious and oriented, has good colouring, nutritional status, body posture and eye contact.
- Systematically examine the patient from head to toe. In the process, a distinction must be made between the *symptoms* (subjective complaints, such as pain, dizziness, difficulty concentrating, eye injuries, problems in grasping objects, calculating distances, etc.) and the objective signs or findings of the physical examination.
- Make a systematic organ-by-organ anamnesis (cardiac, respiratory, digestive and so forth). Try to put in connection the findings with the different moments in the account of events.
- The signs will be the result of a thorough general examination, including head, neck, thorax with cardiopulmonary auscultation and palpation, abdomen with palpation, percussion and auscultation, upper and lower extremities, skin, neurological examination of the central and peripheral nervous system, and genitourinary system.
- In both the anamnesis and the examination, it is important to look for details that help establish a possible causal link between the injuries and the objects of injury used.

victim themselves, which will help establish causal links and consistency with the account of events (Table 4).

4.3.2. Assessment of ocular/ophthalmological damage.

Basic anatomy of the eye. To perform its function, the human eye has several anatomical structures that complement each other:

- The eyeball with its anterior and posterior compartments.
- The muscle-tendon structure is responsible for the synchronous movements of both eyes.
- The vascular-nerve bundle.
- The orbital structure with the surrounding bony walls, eyelids and lacrimal ducts.
- Orbital contents of liquid consistency (aqueous humour and vitreous humour).

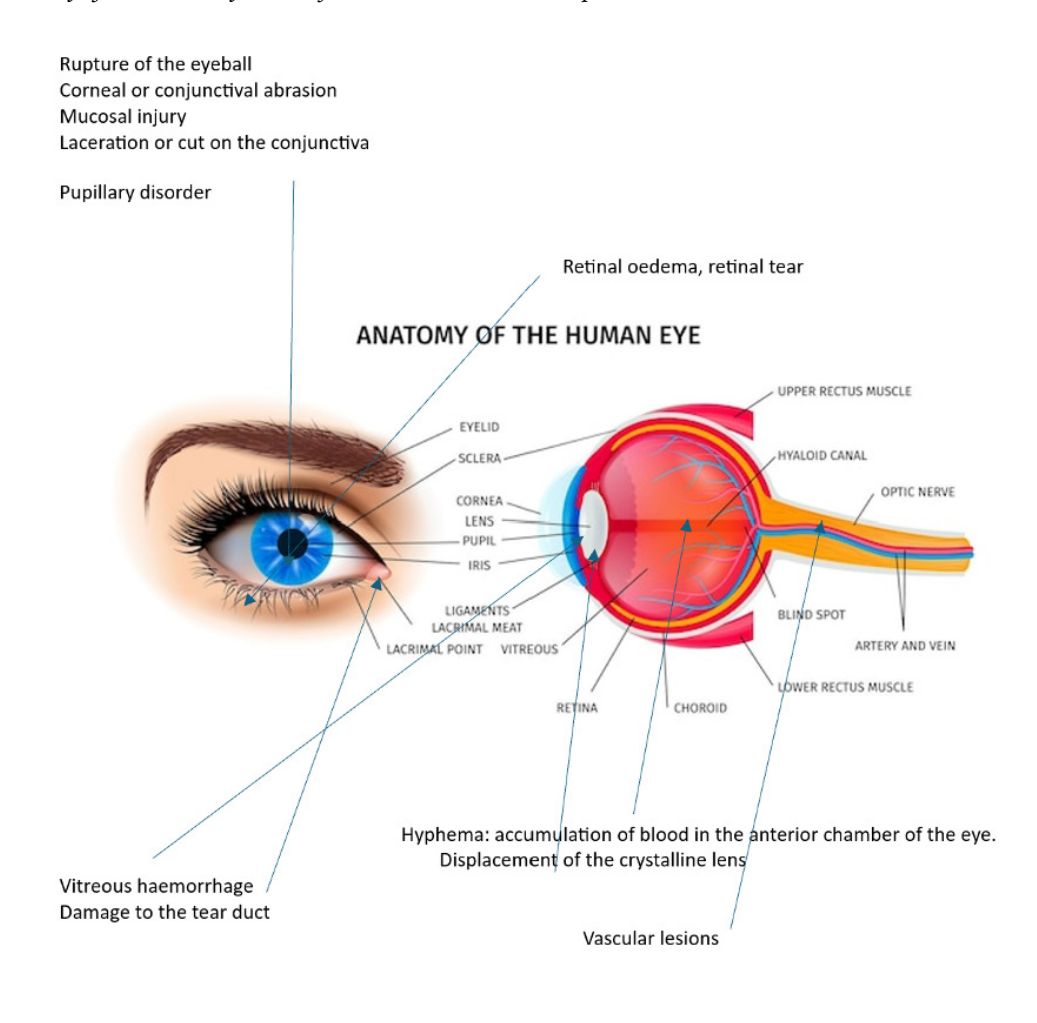
Eye injuries. Each of these structures is susceptible to injury upon insult. This injury can be acute and sometimes self-limiting, sometimes with permanent sequelae, including complete and irreversible vision loss in the eye. It is therefore necessary to be familiar with the most common injuries, their consequences and the mechanism of injury.

Types of eye injuries. There are open globe and closed globe injuries.

Open globe: With outflow of aqueous or vitreous humour.

- Open rupture of the eyeball/burst: by direct trauma with a blunt object of sufficient size.
- Laceration (cut or wound) of the globe, with loss of substance due to direct trauma with a small sharp object, foreign body, projectile, etc.

Figure 2. Anatomy of the human eye and injuries due to less-lethal weapons



Closed globe: Contusion, with or without partial laceration, without loss of aqueous humour.

- Conjunctival or corneal abrasion.
- Injury to the epithelium or mucous membranes.
- Hyphema: accumulation of blood in the anterior chamber of the eye.
- Traumatic pupillary disturbance, due to damage to the iris sphincter.
- Dislocation of the crystalline lens: displacement of the native or artificial lens implant from its original location.
- Vitreous haemorrhage: bleeding into the vitreous cavity.
- Commotio retinae: oedema in the retina secondary to trauma.
- Retinal detachment: detachment of the retina from the underlying choroid and sclera.

Types of periocular injuries. In addition to damage to the eye itself, there may be damage to the structures surrounding the eye, which can impact both aesthetically and its function.

- Eyelid injuries: lacerations, haematomas etc.
- Ruptured or damaged tear duct.
- Orbital fractures: any of the bones that make up the orbit. This may also involve possible complications and sequelae that may range from injuries to the central nervous system (brain trauma or other), to facial nerves and sensory disorders or paralysis.

Indirect injuries. All these structures are interrelated, so high-energy trauma, in addition to direct impact injuries, can cause other injuries that we will call indirect and that derive from the secondary involvement of different structures. These are clear examples:

- Retinal detachment, caused by a kickback effect that generates back pressure on the retina.
- Vascular lesions, leading to a retinal ischaemic effect.
- Lesions of some trigeminal nerve branches that may cause long-term hypoesthesia or anaesthesia of the ipsilateral hemiface or neuralgia-like pains.

Some of these lesions also have the additional difficulty that they may remain undetectable in the first examinations and may present with symptoms at a later stage, even months later.

4.3.3. The most frequent mechanisms of injury.

In the case of impact weapons, a distinction must be made between hand-held weapons, such as batons or expandable batons, and kinetic impact projectiles. In both cases, the most important thing is the kinetic energy of the blunt object, which is proportional to the square of the velocity.

This means that if the speed is doubled, the kinetic energy is multiplied by 4; if the speed is tripled, the kinetic energy is multiplied by 9. In addition to the speed, the object's size, shape, or distance from which it is fired must be investigated. This will enable the expert to establish a causal link between the account of events and the objectified injuries.

As for irritants, with tear gas (chlorobenzalmalononitrile or CS) and so-called pepper gas (N-vanillylnonamide or pseudocapsaicin) (PAVA), it will be essential to find out whether the victims were in an enclosed or open place; whether it was delivered through sprayers or through grenades or projectiles which can also cause impact injuries; and the percentage of chemical or its concentration. These agents, at incorrect concentrations or in enclosed areas, can cause permanent eye burns through corneal damage, leading to opacities as sequelae (Table 5).

4.3.4. Long-term consequences of injury.

Injuries caused by eye trauma result in significant sequelae and disability, with a substantial clinical impact that affects the economic, occupational, social and family situation. According to the World Health Organisation, eye injuries are responsible for 19 million cases of unilateral amaurosis (temporary loss of vision in one or both eyes), 2.3 million cases of bilateral poor vision and 1.6 cases of bilateral blindness worldwide.

Long-term consequences of eye injuries that should be explored:

- Restricted visual field, with loss of three-dimensional vision, associated with difficulties in manual tasks, reading and writing, driving, inability to carry out particular work and social activities, and increased risk of falls due to impaired distance calculation.
- Hypersensitivity to dazzling light, poor handling of shadows, and possible impairment of colour vision.
- Impairment of night vision.

In addition, the psychological and psychosocial impacts of eye injuries are discussed in the next section.

4.3.5. Causal link between aggression and injury.

To determine whether a sequela is secondary to a specific trauma or aggression, we must be able to establish a causal relationship (cause-effect), and this is not always easy. Sometimes, the sequela is the product of several causes that may be related to the patient's previous characteristics. Aggression on an eye already suffering from myopia magna, or a cataract, is not the same as on a healthy eye. On the other hand, forensic medicine includes a series of so-called classical principles that must be carefully analysed, among which are the appropriate nature

Table 5. Causal analysis: mechanisms, injuries and clinical consequences

Less lethal weapons	Injuries	Clinic
Blunt impact weapons: truncheons, batons or extendable batons, or any blunt object.	Direct contusion with skin bruising, wounds or skin lacerations Laceration of the eyeball Eye burst Muscle lesions Lacrimal involvement Bone fractures	Pain Dizziness Loss of visual acuity. Diplopia or double vision Blindness or complete loss of vision in the affected eye Loss of binocular vision (loss of vision in three dimensions)
Kinetic impact weapons, projectiles, rubber balls, rubber bullets, etc.	Direct contusion with skin bruising, wounds or skin lacerations Laceration of the eyeball Eye burst Muscle lesions Lacrimal involvement Bone fractures	Pain Dizziness Loss of visual acuity. Diplopia or double vision Blindness or complete loss of vision in the affected eye Loss of binocular vision (loss of vision in three dimensions)
Irritant agents such as pepper spray or tear gas	Local inflammation and irritation of the corneal mucosa Chemical burn Corneal opacities Keratitis or keratosis	Erythema (redness) Severe self-limiting or persistent pain Significant tearing Occasional loss of visual acuity Scotomas (demarcated areas of vision loss) Dry eye
Agents with a blast mechanism, such as stun grenades	Impacts with high velocity, small foreign bodies causing blunt injury (bruises, lacerations, etc.). Corneal burns Skin burns	Pain Partial or complete loss of visual acuity Dry eye Tearing

Table 7. Criteria for establishing the causal link of the medical and ophthalmological expert assessment of eye injuries

Nature of the trauma	Aggressor object (shape, size, etc.), energy and kinetics, secondary aggressors (gases, burns).
Post-traumatic aetiology	The injury is secondary to external aggression and not to any other cause.
Topographical correlation	Anatomical matches, taking into account the effects of kickback.
Symptomatic continuity	Evolution of symptoms from the moment of the aggression, and its evolution in the following days and months.
Chronological criterion	The time between the onset of the injury and the assault must be clinically plausible.
Previous integrity of the area	Information on the pre-assault condition of the injured party.
Exclude a different external cause.	Attempt to determine, based on the mechanism of injury, that there is no alternative cause to the injury.

of the trauma, post-traumatic aetiology, topographical correlation, symptomatic continuity, chronological criteria, previous integrity of the area, and that we can exclude an alternative external cause.

It is, therefore, essential to collect the necessary data in the evaluation to be able to answer these questions (Table 7).

4.4. Assessment of psychological and psychosocial issues

Given that eye injuries have consequences in all spheres of the person when analysing the psychological and psychosocial impacts, it will be helpful to separate the clinical implications (linked to psychological distress and the effect on mental health) and the non-clinical impacts (connected to the different areas of the person's daily life and life project).

4.4.1. Psychological clinical impact assessment.

Emotional impacts. Several reviews on the psychological and psychiatric impacts of traumatic eye amputations agree that special attention should be paid to symptoms of acute stress and post-traumatic stress, depressive symptoms and increased alcohol and substance abuse. In addition, several specific psychological syndromes are highlighted and should be explored systematically:

- a. Social anxiety is more marked in women and people between 20 and 35 years of age.
- b. Adjustment problems arising from loss of social status, related to loss of employment, the need to resort to lower-skilled jobs, and difficulties in maintaining previous social and economic status.
- c. Constant, and sometimes disabling, fear of injury to the sound eye and total blindness.
- d. Susceptibility, anger or irritability in interaction with other people.
- e. Phantom pain syndromes may last for months or even years and may have a poor therapeutic response.
- f. Occasional hallucinatory syndromes with false perceptions: white squares, blurred images and other elements that can compromise the person's quality of life.

Explore basic emotions, especially guilt or shame, related to the events (e.g. going to the demonstration) or their consequences (e.g. disfigurement and cosmetic damage and difficulty being in crowded situations). Some of this may be survivor shame if other people had more severe consequences or even died.

Neuropsychological impacts. One of the challenges in screening is to distinguish psychological symptoms from neuropsychological impacts. In case of doubt, it is especially relevant to be able to perform imaging tests to rule out brain damage or a

psychometric examination (see specific section below). At least three situations should be distinguished:

- Damage due to a traumatic brain injury leading to dissociative symptoms/amnesia of a psychogenic nature.
- Ruling out previous causes of organic brain damage and determining that the leading cause of neuropsychological impairment is the impact of the projectile. Thus, for example, in people with a history of alcoholism or other causes of neuropsychological alterations, it is essential to determine what the previous damage was and which, therefore, would not be attributable to the impact of the projectile.
- Assess for minor neurological damage or diffuse brain damage associated with a previous head injury. Consultation with a neurologist may be necessary, if such a possibility exists.

4.4.2. Psychological non-clinical impact assessment.

Ontological or existential. Numerous non-clinical impacts may significantly impair the victim's autonomy and ability to resume everyday life. In the case of eye injuries, it is particularly relevant to assess:

- Self-confidence, self-esteem, self-image and associated feelings of humiliation and shame.
- Specific and non-specific fears, whether or not related to the traumatic events.
- Ability to communicate with others and share experiences. Balance between expectations of empathy and support, and the possible burnout of family and friends.
- Ability to cope with adaptation and reassessment of life priorities.
- Experiences of helplessness, vulnerability, a tendency towards hopelessness, intolerance to uncertainty, and fear of change.
- Purpose and meaning: life project.
- Expectations regarding judicial processes.

Related to the life project. It is essential to be able to explore five aspects:

1. Impacts on affective and couple life, including personality changes, perception of support, changes in communication style, impact on sex-affective relationships and bodily expression, and impact on roles within the couple.
2. Impacts on family life, including how the events have impacted other family members. There can be two types of impacts on the family: (a) vicarious traumatic impacts (i.e. having post-traumatic symptoms from witnessing or hearing the account of what happened) and (b) readjustment of roles within the family.

3. Impacts on personal and professional development (dropping out of school, losing employment, etc.)
4. Economic impacts, including loss of income and social/financial status and loss of career opportunities.
5. Impacts on the political or social project, if relevant, and alternatives. In this sense, the psychological effect (generally positive) of the spaces of vindication in which the person can participate.

In this regard, the use of quality of life scales or scales of impacts associated with eye injuries can be helpful, as set out below.

4.5. Psychometric assessment

Psychometric screening may support the assessment of both clinical and non-clinical impacts.

4.5.1. Psychometric clinical impacts.

Many tools, not specific to eye injury impacts are available for clinical focused screening. Examples include the PCL-5 inventory (Blevins et al., 2015) for assessing post-traumatic symptomatology, the BDI-II questionnaire (Beck, A. T., Steer, R. A., & Brown, 1996) for depressive symptoms and others. Cognitive impairment screening scales are also a valuable tool for making a differential diagnosis by assessing learning, memory, information processing and spatial representation, which may be impaired due to the loss of cognitively stimulating activities due to eye trauma (Lim et al., 2020). In this regard, some helpful and well-known tools are the MMSE (Mini-Mental State Examina-

tion) (Folstein & Folstein, 1975), the MOCA (Montreal Cognitive Assessment) (Nasreddine ZS, Phillips NA, 2005) or the Rey Complex Figure Test.

4.5.2. Psychometric non-clinical impacts.

For the evaluation of non-clinical impacts, the VIVO Questionnaire can support the assessment of those of an ontological or existential nature. (Pérez-Sales et al., 2012). For those related to impacts on the life project, there are some tests focused on the assessment of health-related quality of life and vision-related quality of life (Vélez et al., 2012, (Vélez et al., 2023). It should be noted that these tools are intended for progressive vision loss associated with ageing and not the acute loss associated with less lethal weapons. Still, all of them, especially the NEI VFQ-25, are extremely useful and are highly recommended in the framework of forensic assessment. A synthesis of the most relevant ones, and the differential elements provided by each of them, can be found in Table 8.

4.5.3. Additional strategies for psychometric assessment.

Systematicity. The professional assessor must help to identify all the areas of functional impairment and psychosocial impacts, by carrying out a joint review of all the person's daily life activities by analysing (a) a standard day from the moment the person gets up in the morning (b) the person's different areas of identity (work, family, partner etc) (c) significant activities for the person before and after the events (sports, hobbies etc). System-

Table 8. Psychometric tests for assessing quality of life associated with eye injury.

Name of the scale	General characteristics
NEI VFQ-25 (National Eye Institute Visual Function Questionnaire - 25) (Broman et al., 2001)	It is the most widely used and referenced scale. Recommend using by default. The original version comprises 51 items; however, the 25-item version is widely validated in different languages and countries. The assessment of visual functioning is presented as a score from 0 to 100, where 0 is the lowest score, and 100 is the best, with subscales by area.
LVQOL (Low vision quality-of-life questionnaire) (Wolffsohn & Cochrane, 2000)	This instrument helps to measure the initial quality of life and the changes that occur with the progression of health status. This scale has 25 items, divided into four dimensions: 1) farsightedness, mobility and illumination; 2) adaptation; 3) reading and precision work; and 4) activities of daily living.
VA LV VFQ-48 (The Vet-Affairs Low-Vision Visual Functioning Questionnaire-48) (Stelmack et al., 2017)	It consists of 48 items. There is an abridged version with 20 items. The original scale was designed to measure the difficulty in performing activities of daily living before and after a visual rehabilitation process.
IVI-28 (Impact of Vision Impairment - 28) (Weih et al., 2002)	Instrument inspired by the WHO International Classification of Functioning, Disability and Health (ICF-2001). The original version contains 32 items grouped into five domains: 1) leisure and work, 2) social interaction, 3) self-care, 4) mobility and 5) reaction to vision loss.

atic screening will decrease inconsistencies, help to raise awareness of deficits and disabilities, and develop recommendations for psychological and functional rehabilitation.

Triangulation. This involves corroborating information by interviewing witnesses for their account of events and interviewing family members for the consequences.

Part 3. Moral, ethical and political dilemmas: Some questions for decision-makers

Documentation of the acute consequences and chronic sequelae of the use of kinetic projectiles and other less lethal weapons shows the devastating impact they have on the lives of the people who suffer their consequences. There is a political responsibility for the fact that a collective security rationale takes precedence over very concrete evidence of severe and irreversible harm to citizens. A single case of eye damage would be enough to justify the prohibition of this type of weapon, because it is the State, the ultimate guarantor of the security of its citizens, which ultimately harms its citizens, knowing that there is a risk and not acting to protect the population²⁵. In cases where there would not even be a security risk and people are killed or maimed to defend private property, the ethical responsibility is much greater.²⁶ Therefore, the question is: how much pain and injury is it ethically acceptable for a State to inflict?

This responsibility is increased when studies indicate that it is *impossible* for kinetic energy projectiles to be used without people being maimed, for at least the following reasons:

- The studies on which the manuals and instructions are based are carried out in laboratory conditions and with expert shooters in optimal environments.²⁷ The reality is that

the projectiles will be used by shooters who shoot under stressful conditions, often in fear, at targets in groups that are constantly moving and where, consequently, the distance is variable. It is impossible to guarantee precisely the area of impact.

- There are imponderable elements of individual vulnerability. Thus, for example, impacts in the lumbar region in a person who has only one kidney or shots in areas close to the spine in a person with osteoporosis.
- The distance in the human body between the highest and lowest risk zones can be centimetres. Thus, an impact on the sternum is only a few centimetres away from a rib impact (which can cause pneumothorax and death), an abdominal impact (liver or spleen burst and high probability of death) or a facial impact (blunt trauma, eye burst, penetrating brain injury).
- Certain projectiles - such as the lead-core projectiles used by Israel or the pellet-firing projectiles used in Chile and India - have erratic and unpredictable ballistic behaviour. The chances of hitting the person in areas not intended by the shooter, of hitting other people behind or to the side, or passing by, are high.
- Handing a police officer a weapon classified as “non-lethal” creates an expectation of safe use (Rocher, 2020) which makes it very easy for safety limits to be breached. Moreover, as has been documented on numerous occasions,²⁸ it encourages the police to make a vindictive use of the weapon in pursuit of a punitive purpose in the conviction of its “non-lethality”. It is common sense that riot police units attract people with differential personality traits.
- The environment of the use of these weapons, protected by superior orders and under supposed legitimacy, favours, in psychological terms, two well-known phenomena: the excessive use of violence associated with the dilution of responsibility²⁹ and the guarantees of impunity related to the mandate to use violence.³⁰

25 The ethical dilemma can be summarised as follows: replacing a lethal weapon (firing live ammunition at citizens) with a *less lethal* weapon means replacing the certainty of injury with the probability of injury. Turning certainty into “probability” is the ethical endorsement of the authorities who acquire and endorse the use of these weapons, and it is exactly the ethical objection of the citizens’ organisations that consider them unacceptable.

26 The UN Human Rights Committee rightly points out in its Comment #36 that the use of potentially lethal weapons for the maintenance of public order may only be justifiable as an extreme measure to protect life or prevent extremely serious injury. In any other case the harm caused is morally unacceptable.

27 On a shooting range, the shooter is at a distance of at least 10 metres from a static target under optimum atmospheric and noise conditions and in the absence of distracting elements. The opposite conditions of a demonstration. In addition, as has been demonstrated (Rocher, 2020), it is practically impossible to estimate real distances in real stress environments.

28 See Case Students of Soacha during the Agrarian Strike in Bogota, where some received up to 20 electric shocks followed by Taser / Case Roger Español on 1 October 2017 in Barcelona where he received up to 3 shots at close range in response to what the police interpreted as provocation / Case Salha Vermella in Rio de Janeiro where some of the people arrested received up to 5 times pepper spray in the eyes in a span of two minutes for what the police interpreted as “resistance” to being arrested.

29 Studies of dilution of responsibility indicate that a person is much more likely to perpetrate violence when it takes place in a group setting and that it is much more difficult, if not impossible, to assign individual responsibility.

30 The legitimacy that labels actions of lethal violence as “excessive

- In most countries, the protocols for using these weapons are neither public nor available for monitoring, which prevents effective citizen control of their use.

But beyond these *operational*, ethical questions, there are *political*, ethical questions, which are what should guide institutional decision-making: Why do States, despite the evidence, continue to use these weapons, and why is there a discourse that these are “more humane” weapons, seeking precisely an ethical justification for the use of weapons against civilians in the exercise of the right to protest? The underlying logic considers people who “disturb order” because they hold divergent opinions to be “enemies”, who should be punished as individuals and in terms of the dissuasive and exemplary effect on other potential citizens.

Conclusions

Taken as a whole and as illustrated by the case studies presented in this Special Section of Torture Journal, less lethal weapon injuries destroy lives. The functional, aesthetic, emotional, familial, economic and moral damage is immense. Despite this, experience from a range of States show the enormous difficulties in making a legal claim - criminal or administrative - against the State for the damage caused. The origin of the small number of complaints and cases that have obtained a favourable ruling is due to a complex tangle of factors of all kinds.

In response to this need, this editorial has comprehensively reviewed the legal and medico-legal aspects of less lethal weapon injuries in the framework of social protest. Areas that do not usually appear in academic publications have been covered with the idea of giving an overview and helping professionals and victims’ organisations in their work.

It is a wide-ranging review and could give the impression that the field is overly complex. This is not our intention. It is no different from other contexts of human rights violations, although it has some specific elements that are important to consider. When these are taken into account, it is possible to bring about legal proceedings with significant chances of success.

Perhaps it is time to articulate networks and open spaces for exchanging knowledge - to which Torture would like to contribute.

In this issue...

This issue features a special section on the use of less lethal weapons and in particular the use of kinetic energy projectiles as a form of ill-treatment or torture.

Matthew McEvoy, Neil Corney, Marina Parras and Rohini Haar present a comprehensive review of the state of the art from a medico-legal perspective based on Omega Foundation’s experience. The UN Special Rapporteur on Torture, Alice Edwards, recalls from her recent report to the UN General Assembly the existence of instruments that are inherently constitutive of torture in relation to the use of less lethal weapons, and calls, in her contribution to the Journal, for their international prohibition.

Marie Bresholt and the Dignity medical team conduct a comprehensive review based on case studies published in the literature on the health impacts of electric shock weapons. This goes hand by hand with the editorial where we have comprehensively reviewed elements related to the litigation of cases and especially to the forensic assessment of eye injuries based on the Istanbul Protocol.

The reviews are followed by case studies with articles by Malose Langa and colleagues (South Africa), Jose Tejada and colleagues (Chile), Anaïs Franquesa and colleagues (Spain), and the MOCAO survivor’s organisation (Colombia). All of them are dominated by the perspectives of the survivors and the enormous legal, medical and psychosocial difficulties faced by victims in all countries. In the Perspectives section, Carles Guillot gives us a first-person testimony of his struggle as a victim of traumatic eye injury and the struggle of the collective he represents.

Within the regular articles section, Jörg Alfred Stippel presents a review of cases of ill-treatment and torture in the Chilean penal system and Justine Dee a review of evidence-based physical therapies in torture survivors.

Finally, there are contributions on the situation of solitary confinement in Turkey based on a visit of a delegation of experts to the country, the situation of the high-security internationally contested prison system in El Salvador by Professor Lutz Oette, the situation of mentally ill persons in prisons in Kosovo by Niman Hajdari, and a letter by Andres Gautier on the situation in the occupied territories of Palestine.

The use of less lethal weapons as a form of ill-treatment or torture is probably one of the most comprehensive and complex issues to have emerged in the field in recent years and we are proud of the important role played by survivors in many of the articles we publish: Undoubtedly a distinct element that we want to maintain and enhance in the future.

use of force” semantically minimises the gravity of the facts and their consequences, allowing for decision-making under pressure to adopt positions of greater violence against citizens.

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