

The Medico-Legal Aspect of the Permanent Deformation of the Face: Case Report and Review of Literature

Yüzde Daimi Değişikliğin Adli Tıp Boyutu: Olgu Sunumu ve Literatürün Gözden Geçirilmesi

M. Gökhan DİZDAR, MD,^a
Tarık ULUÇAY, MD,^a
Yeşim TUYUJİ, MD,^a
Ertuğrul TATLISUMAK, MD,^b
Mahmut AŞIRDİZER, MD,^a
Mehmet Sunay YAVUZ, MD^a

Departments of
^aForensic Medicine,
^bAnatomy,
Celal Bayar University Faculty of Medicine,
Manisa

Geliş Tarihi/Received: 08.01.2010
Kabul Tarihi/Accepted: 20.03.2010

This article was reported as a poster presentation at the 4th Mediterranean Academy of Forensic Science Meeting, 14-18 October 2009, Antalya, Turkey.

Yazışma Adresi/Correspondence:
Mahmut AŞIRDİZER, MD
Celal Bayar University Faculty of Medicine,
Department of Forensic Medicine, Manisa,
TÜRKİYE/TURKEY
masirdizer@yahoo.com

ABSTRACT In this case report, we aimed to discuss legal aspects of permanent sequels and permanent deformations following facial injury. A 29-year-old male was injured in a coal mine as a result of dynamite explosion. After 8 months from the event, on the medico-legal examination of the case, there were numerous scars of irregular injuries, colored purple-green and collapsed from the skin level, on the face and other body regions and several fracture sequels on his body. His right eye was eviscerated and ptosis was observed on his left eyelids. The appearance of the face was medico-legally considered as “permanent deformation of the face”. When a permanent disfigurement is considered as an aggravating factor in penal codes, between countries, some discrepancies concerning its definition and boundaries may appear. In this case report, some opinions suggested on this subject in conformity with the principle of the equality in the International laws.

Key Words: Facial injuries; complications; forensic medicine; legislation & jurisprudence

ÖZET Bu olgu sunumunda, yüz yaralanmasını izleyen yüzde sabit iz ve daimi değişikliğin yasal boyutunun tartışılması amaçlanmıştır. 29 yaşındaki erkek olgu kömür ocağında dinamit patlaması sonucu yaralanmıştır. Olaydan 8 ay sonra yapılan adli tıp muayenesinde, yüz ve vücudunda mor-yeşil renkli ve ciltten çöküklük gösteren çeşitli düzensiz yara skarları ve vücudunda çeşitli kırık sekelleri saptanmıştır. Sağ gözü evissere idi ve sol göz kapağında pitoz bulunmaktaydı. Yüzün görünümü adli tıbbi olarak “yüzün daimi değişikliği” olarak değerlendirildi. Daimi şekil bozukluğu, ceza yasalarında ağırlaştırıcı bir faktör olarak değerlendirilmektedir. Ülkeler arasında onun tanımlaması ve sınırları ile ilgili bazı farklılıklar görülebilmektedir. Bu olgu sunumunda, uluslararası hukuktaki eşitlik prensibi gereğince bu konuda eşitliği sağlamak amacıyla bazı fikirler öne sürülmüştür.

Anahtar Kelimeler: Fasiyal yaralanmalar; komplikasyonlar; adli tıp; yasama ve hukuk bilimi

Türkiye Klinikleri J Foren Med 2011;8(1):46-53

Facial injuries account for approximately 12% of recorded injuries and injury surveys have indicated a tendency for increased incidence of facial injuries.¹ Particularly, soft tissue injuries of the face and fractures of the facial bones are frequent results after motor vehicle crashes²⁻⁴ especially in motorcycle accidents,^{5,6} home and industrial accidents,^{7,8} assaults^{3,9,10} and crashes during some recreational and sportive activities, such as bicycling,^{3,11} skiing,³ ice hockey¹² and football.¹³ The other reasons of facial injuries are physical, electrical and chemical burns,¹⁴⁻¹⁶ falls,^{3,17} inten-

tional traumas such as in child or wife abuse,^{18,19} explosions,²⁰ firearm injuries,²¹⁻²³ knife injuries²⁴ and bites of some animals.^{25,26}

Serious or life-threatening complications, which include airway obstructions, hemorrhages, and cervical spine or brain injuries, are occasionally associated with facial injuries.^{1,3,13,27} Moreover, facial injuries may cause permanent derangement of functions such as vision, smell, taste, mastication and swallowing.^{3,27} The trigeminal and facial nerves may be irreparably damaged resulting as anesthesia dolorosa and impaired facial expression respectively.³ Facial appearance may be destroyed by scars, fractures, soft tissue defects or facial nerve injury.^{3,27} Facial injuries, especially the ones resulting as observable permanent disfigurement of the face, may cause severe psychological morbidity, because facial appearance is important in all societies^{3,27,28} and this psychological legacy of the facial injury can persist for a long time after the injury.^{3,28,29} The low self-esteem generated by the patient's perception of their own deformity, limits their ability to achieve their full potential in society. Furthermore, each time the patients examine their face in the mirror, the disfigurement they see reminds them the traumatic event, that led to their injury³.

These injuries, in consideration of their results, are quite important in medico-legal evaluation. In this case report, we aimed to discuss legal aspects of permanent sequels following facial injury.

CASE REPORT

A 29-year-old male was injured in a coal mine as a result of explosion of dynamites and he was hospitalized in the emergency department of a state hospital. On physical examination, multiple burns, lacerations and injuries were seen on the face and the other body regions. The patient was transferred to a university hospital due to presence of a life-threatening situation. On physical examination, partite lacerations on the both lids in both eyes, deep laceration, approximately 10 cm, in length in the right submandibular region and common multiple little lacerations and abrasions on

the face were detected. On x-rays, USG and CTs of all the body, there were multiple foreign bodies in the orbital globes and face, fractures at the transverse and spinal processes of the 11th and the 12th thoracic and the 1st and the 2nd lumbar vertebrae, a fracture at the middle part of the ulna diaphysis, a fracture at the nasal bone and intrascrotal hemorrhage.

On ophthalmologic examination, the both ocular pressures were found to be negative. There were lacerations including partite at the all layers and tissue defects at the lids of the right eye. The both globes and corneas were perforated, the uveal tissues were totally prolapsed in the both eyes, both of the lenses were protruded and movements of the both eyes were lost. On bilateral orbital CT, there was edema on the right frontal and periorbital regions and multiple foreign bodies in the both peri-orbital regions, especially in the lateral of the right orbita. The lenses of both eyes could not be seen and the right globe was not present in the orbital cavity. There were foreign bodies with high density and hematoma in the left vitreous body. Additionally, the fractures of the nasal bone, the ceiling of the right orbita, the front region of the left lamina papricea were recorded. The evisceration of the right eye and the corneoscleral perforation were repaired and the cornea in the left eye was sutured. A dorsal splint was used in the orthopedic treatment of the ulnar fracture. Plastic and reconstructive surgeons performed closed reduction for the treatment of nasal bone fracture and they repaired the laceration on the face.

The patient was referred to our department for medico-legal evaluation in the 8th month after the event. On the physical examination, there were scars of irregular injuries, purple and green in color and collapsed from skin level, at the right region of the face. They were 0.5 cm-7 cm in length (Figure 1a). On the forehead, there was an irregular injury scar, 10 cm in length and extending from the right eyebrow to the left eyebrow. The motion of the lids of the left eye was immensely restricted and there was ptosis of the lids (Figure 1b). The nose was slightly deviated to the right side. There were wide

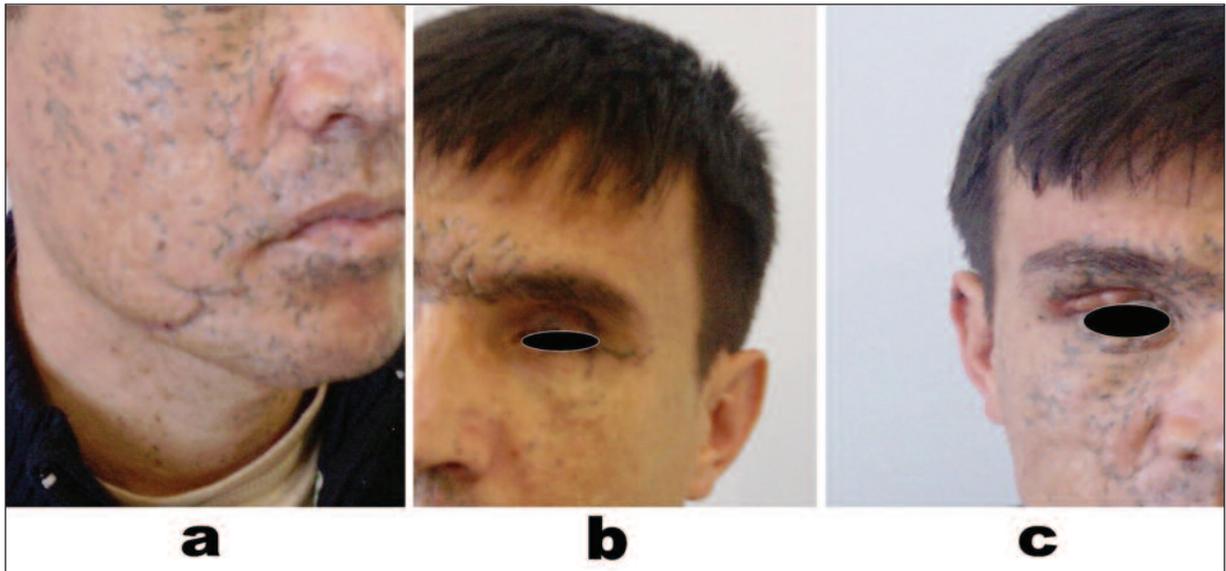


FIGURE 1: (a): numerous scars of irregular injuries, colored purple and green and collapsed from the skin level, in the right region of the face; (b): An irregular injury scar on the forehead and ptosis of the left eye lids; (c): Evisceration and eye prosthesis in the right eye.

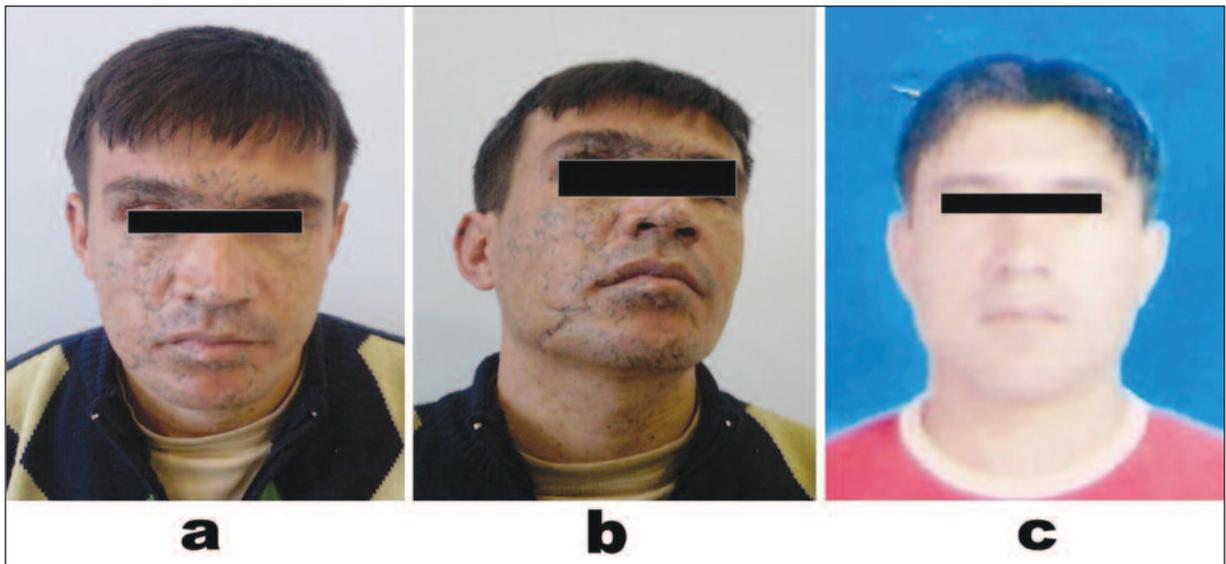


FIGURE 2: (a-b): The appearance of the face during medico-legal examination and (c): Before explosion.

tissue defects, which were irregularly cicatrized at the both lids of the right eye. The right eye was eviscerated and a prosthetic eye was settled in the orbita (Figure 1c).

In addition to injuries of the face and the eyes, at the entire of the right arm, there were macula shaped, oval or circular injury scars as like 0.1 cm-2 cm in diameters in the front thoracic region, the front abdominal wall and the front side of the right

femoral region. Two injury scars 4x7 cm and 2x7 cm in size in the left abdominal wall and two injury scars 5x10 cm and 3x11 cm in size in the middle of the back were detected.

The appearance of the face (Figure 2a, 2b), when compared with the photograph before explosion (Figure 2c), was considered as “permanent deformation of the face”.

DISCUSSION

Today's penal statutes according to Model Penal Code classify bodily injuries as non-serious and serious^{30,31}. Physical damage, or what could reasonably be construed as pain, suffered by a victim that a physician or registered nurse determines as could not have caused the permanent disfigurement of a victim or an impairment of his or her bodily functions, or contributed to the death of a recipient, was accepted as non-serious; whilst, physical damage suffered by a victim, which a physician or registered nurse determines as caused or could have caused the death of a victim, or caused the impairment of their bodily function(s), or the permanent disfigurement of a victim was accepted as serious³¹.

The old common law crime of mayhem is still recognized as a separate offence in some jurisdictions, although in growing number of jurisdictions, as under the Model Penal Code, mayhem has been abolished as a separate offence, the disablement and disfigurement elements have been included in pertinent assault and battery provisions as aggravating circumstances.³⁰⁻³⁹

Permanent disfigurement was defined for all body parts in penal codes of some countries or states including The Revised Code of Washington, Nigeria Criminal Code, The Florida Statutes, Pakistan Penal Code, etc;^{30,34-36} it was defined for the face in penal codes of some countries or states including The Penal Code of the Russian Federal Socialist Republic, The Texas Penal Code, Italian Penal Code, etc.^{32,33,40}

In Revised Code of Washington, "great bodily harm" was defined as "bodily injury which creates a probability of death, or which causes significant serious permanent disfigurement, or which causes a significant permanent loss or impairment of the function of any bodily part or organ".³⁰ Florida Statutes defines serious personal injury as "great bodily harm or pain, permanent disability, or permanent disfigurement" (Article 784.045).³⁵ According to Nigerian Criminal Code, "grievous harm" means "any harm which amounts

to a main or dangerous harm as defined in this section, or which seriously or permanently injures health, or which is likely to injure health, or which extend to permanent disfigurement or to any permanent or serious injury to an external or internal organ, member, or sense"³⁴. In Pakistan Penal Code, it was reported that whoever destroys or permanently impairs the functioning, power or capacity of an organ of the body of another person, or causes permanent disfigurement is said to cause "Itlaf-i-Salahiyyat-i-udw" (Article-335). Whoever, by doing any act with the intention of causing hurt to any person, or with the knowledge that he is likely to cause hurt to any person, causes "itlaf-i-salahiyyat-i-udw" of any person, shall, in consultation with the authorized medical officer, be punished with qisas (retribution) and if the qisas (retribution) is not executable, keeping in view the principles of equality in accordance with the Injunctions of Islam, the offender shall be liable to arsh (the Ninth Heaven) and may also be punished with imprisonment of either description for a term which may extend to ten years as tazir³⁶.

In 108th section of the Penal Code of the Russian Federal Socialist Republic, it was described intentional infliction of grave bodily injury. As to this law, intentional infliction of bodily injury dangerous to life or resulting in loss of sight, or of hearing, or of any organ, or in loss by an organ of its function, or in mental illness or in any other impairment of health, joined with persistent loss of at least one third of the capacity to work, or when it results in an interruption of pregnancy or permanent disfigurement of the face, shall be punished by deprivation of freedom for a term not exceeding eight years. The same actions, if they cause the victim's death, or assume the character of torment or torture or are committed by an especially dangerous recidivist, shall be punished by deprivation of freedom for a term of five to twelve years.³²

Texas Penal Code was described that (in Section 1.07, Article 46) "Serious bodily injury" means

bodily injury that creates a substantial risk of death or that causes death, serious permanent disfigurement or protracted loss or impairment of the function of any bodily member or organ.³³

According to the Italian Criminal Code, the injury is considered serious in the following cases: if the act causes an illness that endangers the life of the injured person, or an illness or inability to engage in ordinary work for more than forty days; if the act causes permanent weakening of a sense or organ (Paragraph 1 of Article 583), if it causes an illness that is definitely or probably incurable; the loss of a sense; the loss of a limb, or mutilation that renders the limb useless, or the loss of functions of an organ or the ability to procreate, or a permanent and serious speech impediment; permanent sequels, which were called “Sfregio Permanente del Viso” in Italian, or permanent deformation, which were called “Deformazione Permanente del Viso” in Italian language (Paragraph 1 of Article 583).^{40,41}

In determining the degree of injury for the purposes of aggravated punishment, Turkish Penal Code as in Italian Penal Code⁴¹ requires an evaluation to determine whether an illness is curable or incurable with simple medical treatment or whether it is a permanent illness (1st and 2nd Paragraph of Article 86); whether it involves permanent weakening of a sense or an organ, or a permanent and serious speech impediment; whether the injury is life-threatening, whether injury causes a permanent sequel on the face; whether it produces a premature birth in a woman (1st Paragraph of Article 87); whether it results in incurable mental or physical illness or vegetable existence; whether it involves the loss of a limb, or mutilation that renders the limb useless, or the loss of functions of an organ or the ability to procreate or speak; whether injury cause permanent deformation of the face; whether it produces a miscarriage in a woman (2nd Paragraph of Article 87), whether it results in the fracture or dislocation of any bone (3rd Paragraph of Article 87) and whether injury causes death (4th Paragraph of Article 87).⁴²

In the medico-legal practice of the Turkish Penal Code, the scalp (front boundary in profile) (visible frontal region is inside the face of a person who lost his/her hair) is the superior boundary of the face; the fictitious lines, which include frontal sides of the auricles and extend to the clavicles from back of the auricles, are lateral boundaries of the face; and the fictitious lines, which extend from the rims of the clavicles to the jugular fosse, are the inferior boundaries of the face⁴³⁻⁴⁴. The frontal side of the neck was not considered as part of the face until the revision of Turkish Penal Code, in 2004^{45,46}. The mark of injury in the face boundaries is considered as “permanent sequel on the face” if it can be seen from the distance of verbal dialogue (approximately from 1-2 meters) under the sunshine or in a well lightened clinic, and if its appearance stables recovery duration.^{43,44,47} For the stability of recovery, the injured individuals usually are examined for the second time six months after injury in the medico-legal practice.⁴⁷ According to the medico-legal concept in Turkey, “permanent deformation of the face” is considered as damage in the face of an injured person which prevents his/her identification by people who know him/her before injury.⁴³⁻⁴⁷

These aggravating components of Turkish Penal Code were discussed in the forensic medicine community mainly because of the subjectivity of the medico-legal evaluation.^{45,46} Yanik et al. suggested that developing a scoring system may prevent this subjectivity;⁴⁵ Dokgoz et al. discussed boundaries of the face and they proposed that all permanent disfigurements on the body must be evaluated as aggravating component of the penal code.⁴⁶

The case, presented here had an injury due to an occupational accident. He suffered from evisceration of the right eye accompanied by permanent deformation of the face due to dynamite explosion. At present, many facial traumas may be treated by successful plastic and reconstructive surgical procedures even if the proper recovery could not be obtained in serious injured individuals.⁴⁸⁻⁵¹ The loss of the eye globe may be estheti-

cally recovered by the use of prosthetic eyes which provide recovery of facial appearance of patients even if they are usually nonfunctional and are not sufficient for relieving psychological damages in the patient.^{52,53} Ye reported that sustaining a burn injury is often a psychological trauma to the victim and it is especially menacing when the face and neck are involved, but early plastic and reconstructive surgery to correct facial and neck post-burn scar disfigurement or deformity is an indispensable treatment to abolish or ameliorate psychological problems.⁵⁴ This psychological trauma may be seen in all trauma cases, even if it is serious in patients with face injury.⁴⁵ Also the definition of permanent disfigurement for all body regions in some penal codes was attributed to these reasons.³¹

CONCLUSION

It seems that, when a permanent disfigurement is considered as an aggravating factor in penal codes, some discrepancies concerning several aspects of its definition and boundaries may appear in between countries. On the other hand, impairment of bodily functions and loss of an organ are defined similarly in almost all penal codes.

Depending on the equality in the essence of the law, we think that the face should not be consid-

ered as a specific body region and that “permanent sequels on the face and permanent disfigurement of the face” should be removed from penal codes in parallel to the advances in the methods of plastic and reconstructive surgery because functional losses such as loss of the eye globe has already taken place as an aggravating component in Turkish Penal Code, like in most penal codes. Permanent sequels on the face and permanent disfigurement of the face should be considered in terms of the compensation laws only because of restitution of surgical and psychiatric treatment costs.

However, if permanent disfigurement as an aggravating factor is to be kept in penal codes, permanent disfigurement should be limited to not only the face but also all body regions, which can be another solution to the issue appropriate for the principle of the equality in the international laws.

We expect that, above mentioned suggests and against opinions to them will initiate a brainstorming on this subject and we can meet around of a collative notion including the principle “equal punishment for equal crime”.

Acknowledgement

This article was prepared after supplied “informed consent” of the case.

REFERENCES

- Sheldon W. Facial injuries. *J Sci Med Sport* 1999;2(Suppl-1):69.
- Batstone MD, Monsour FN, Pattel P, Lynham A. The patterns of facial injury suffered by patients in road traffic accidents: a case controlled study. *Int J Surg* 2007;5(4):250-4.
- Hutchison IL, Magennis P, Shepherd JP, Brown AE. The BAOMS United Kingdom survey of facial injuries part 1: aetiology and the association with alcohol consumption. *British Association of Oral and Maxillofacial Surgeons. Br J Oral Maxillofac Surg* 1998; 36(1):3-13.
- Nakhgevanly KB, LiBassi M, Esposito B. Facial trauma in motor vehicle accidents: etiological factors. *Am J Emerg Med* 1994; 12 (2):160-3.
- Gopalakrishna G, Peek-Asa C, Kraus JF. Epidemiologic features of facial injuries among motorcyclists. *Ann Emerg Med* 1998; 32(4):425-30.
- Kraus JF, Rice TM, Peek-Asa C, McArthur DL. Facial trauma and the risk of intracranial injury in motorcycle riders. *Ann Emerg Med* 2003;41(1):18-26.
- Latoni JD, Shibuya T, Arden RL. Soft tissue trauma. In: Mathog RH, Arden RL, Marks SC, eds. *Trauma of the Nose and Paranasal Sinuses*. 1st ed. Stuttgart-New York: Thieme: 1995. p.2-19.
- Fornazieri MA, Yamaguti HY, Moreira JH, Navarro PL, Heshiki RE, Takemoto LE. Fracture of nasal bones: an epidemiologic analysis. *Int Arch Otorhinolaryngol* 2008; 12(4):568.
- Koorey AJ, Marshall SW, Treasure ET, Langley JD. Incidence of facial fractures resulting in hospitalisation in New Zealand from 1979 to 1988. *Int J Oral Maxillofac Surg* 1992; 21(2):77-9.
- Oakey F, Ayoub AF, Goodall CA, Crawford A, Smith I, Russell A, et al. Delivery of a brief motivational intervention to patients with alcohol-related facial injuries: role for a specialist nurse. *Br J Oral Maxillofac Surg* 2008; 46(2):102-6.
- Björnstig U, Oström M, Eriksson A, Sonntag-Oström E. Head and face injuries in bicyclists-with special reference to possible effects of helmet use. *J Trauma* 1992;33(6): 887-93.

12. Stevens ST, Lassonde M, de Beaumont L, Keenan JP. The effect of visors on head and facial injury in National Hockey League players. *J Sci Med Sport* 2006;9(3):238-42.
13. Mihalik JP, Myers JB, Sell TC, Anish EJ. Maxillofacial fractures and dental trauma in a high school soccer goalkeeper: a case report. *J Athl Train* 2005; 40(2):116-9.
14. Charukamnoetkanok P, Wagoner MD. Facial and ocular injuries associated with methamphetamine production accidents. *Am J Ophthalmol* 2004;138(5):875-6.
15. Dancey A, Mein E, Khan M, Rayatt S, Pappini R. Is crow's feet sign a reliable indicator of corneal injury in facial burns? *J Plast Reconstr Aesthet Surg* 2008;61(11):1325-7.
16. Younger JR, Fedyk AR, McHenry JG, Blomquist PH. Ocular and facial injuries associated with the use of immersion heaters in an inmate population. *Am J Ophthalmol* 2006;141(6):1147-8.
17. Wade CV, Hoffman GR, Brennan PA. Falls in elderly people that result in facial injuries. *Br J Oral Maxillofac Surg* 2004;42(2):138-41.
18. Naidoo S. A profile of the oro-facial injuries in child physical abuse at a children's hospital. *Child Abuse Negl* 2000;24(4):521-34.
19. Goldberg SH, McRill CM, Bruno CR, Ten Have T, Lehman E. Orbital fractures due to domestic violence: an epidemiologic study. *Orbit* 2000;19(3):143-54.
20. Bouchard CS, Vaziri B. Dehiscence of radial keratotomy wounds without globe rupture following explosion injury. *J Refract Surg* 2001;17(5):561-3.
21. Baransel IA, Coşkun AG, Dülger HE. [Evaluation of facial firearm injury cases presented to Forensic Medicine Department of Gaziantep University between 2000 and 2005]. *Journal of Academic Emergency Medicine* 2007;5(1):31-4.
22. Majid OW. Persistent oronasal fistula after primary management of facial gunshot injuries. *Br J Oral Maxillofac Surg* 2008;46(1):50-2.
23. Skavysh A, Wojcik R, Murphy Jr RX, Kazahaya M, Pasquale MD, Barraco RD. Facial injuries by potato gun: spuds as scuds. *Injury Extra* 2007;38(3):81-3.
24. Youssef AS, Morgan JM, Padhya T, Vale FL. Penetrating craniofacial injury inflicted by a knife. *J Trauma* 2008;64(6):1622-4.
25. Ugboko VI, Olasoji HO, Ajike SO, Amole AO, Ogunidipe OT. Facial injuries caused by animals in northern Nigeria. *Br J Oral Maxillofac Surg* 2002;40(5):433-7.
26. Mcheik JN, Vergnes P, Bondonny JM. Treatment of facial dog bite injuries in children: a retrospective study. *J Pediatr Surg* 2000; 35(4):580-3.
27. Zhaohui S, Shuxia Z, Xinghua F, Shujun L, Yanpu L, Bin B, et al. The design and implementation of chinese maxillofacial trauma registry, analysis and injury severity score system. *J Trauma* 2008;64(4):1024-33.
28. Wong EC, Marshall GN, Shetty V, Zhou A, Belzberg H, Yamashita DD. Survivors of violence-related facial injury: psychiatric needs and barriers to mental health care. *Gen Hosp Psychiatry* 2007;29(2):117-22.
29. Bisson JI, Shepherd JP, Dhutia M. Psychological sequelae of facial trauma. *J Trauma* 1997;43(3):496-500.
30. Bergelson V. Consent to harm. *Rutgers Law School (Newark) Faculty Papers* 2008; 46(1):99-129.
31. The Law Reform Commission. Codification in United States, discussion and proposals for reforms. In: *The Law Reform Commission, ed. Report on Non-Fatal Offences against the Person*. 1st ed. Dublin: The Law Reform Commission; 1994. p. 371, 375, 381-2, 402, 446-7, 456, 567.
32. Stepan J, Kellogg EH. The world's laws on voluntary sterilization for family planning purposes. *Population Report -Sterilization* 1973; 2(C-D):57-132.
33. Bergelson V. The right to be hurt: testing the boundaries of consent. *The George Washington Law Review* 2007;75(2):165-236.
34. Alemika EEO, Chukwuma I, Lafratta D, Messerli D, Souckova J. Protection from torture and other cruel, inhuman or degrading treatment or punishment. In: Alemika EEO, Chukwuma I, Lafratta D, Messerli D, Souckova J, eds. *Rights of the Child in Nigeria*. 1st ed. Geneva: Committee on the Right of the Child; 2004. p. 15-20.
35. Johnson MCA. Injury to the victim. *Nonconsensual Sex Crimes and the UCMJ: A Proposal for Reform*. 1st ed. Advocate: Judge Advocate General's School United States Army; 2003. p. 73-7.
36. Qadri SH. Penal codes. *Pakistan Penal Code (XLV of 1860)*. 9th ed. Lahore: Mansoor Book House; 1986. p. 207-383.
37. Emanuel SL. *Assault, Battery and Mayhem*. Criminal Law, 6th ed. US: Aspen Publishers Inc; 2007. p. 279-80.
38. Council of Europe. Bosnia and Herzegovina, Croatia. In: Council of Europe, ed. *Legislation in the Member States of the Council of Europe in the Field of Violence against Women*, Volume-1, 1st ed. Strasbourg: Council of Europe; 2004. p.52, 68.
39. McClintock M, LeGendre P. France. In: Posner M, ed. *Country-by-Country: Hate Crime Report Card*. 1st ed. New York: Human Rights First; 2007. p. 25-7.
40. Cosentino V. [Criminal Code]. *Breve Commentario Al Codice Penale Italiano*, Prima ed. Napoli: Presso Gabriele Sarbacino; 1866. p. 449, 454, 624, 629.
41. Öztürel A. [Investigation on the permanent sequel of the face]. *Ankara Üniversitesi Hukuk Fakültesi Dergisi* 1962;19(1-4): 49-64.
42. Özgenç İ. [Crimes against persons]. *Gerekeçli Türk Ceza Kanunu*. 1. Baskı. Ankara: Seçkin Yayıncılık; 2007. p 178-83.
43. Çolak B. [Preparing forensic reports for injuries are the basic duty and responsibility of physicians]. *Türkiye Klinikleri J Surg Med Sci* 2006;2(50):1-9.
44. Tuğcu H, Toygar M, Can İO, Safalı M. [The responsibility of physician to prepare a forensic and medical report]. *TAF Preventive Medicine Bulletin* 2006;5(6):466-75.
45. Yanık A, Dokgöz H, Sözen S, Günaydin U. [Evaluation of persistent mark and persistent damage in face in legal medicine practice]. *Clinical Forensic Medicine* 2002;2(2): 7-14.
46. Dokgöz H, Yanık A, Karaca N, Suyugül N. [The assessment of persistent damage in the face notion as expressed in the article 456 of Turkish Penal Code with regard to the borders of the face (three cases)]. *Clinical Forensic Medicine* 2002;2(1):25-8.
47. Balci Y, Eryürük M. [The essential theorems and conceptions in the preparation of medico-legal reports: Legal and medical responsibilities of practitioners]. *Klinik Gelişim* 2009;22 (Özel Sayı): 48-55.
48. Holmes S. Facial trauma--who should provide care? *Br J Oral Maxillofac Surg* 2009;47(3):179-81.
49. Kovacs L, Zimmermann A, Wawrzyn H, Schwenzler K, Seitz H, Tille C, et al. Computer aided surgical reconstruction after complex facial burn injuries-opportunities and limitations. *Burns* 2005;31(1):85-91.
50. Perry M. *Advanced Trauma Life Support (ATLS) and facial trauma: can one size fit all? Part 1: dilemmas in the management of the multiply injured patient with coexisting facial injuries*. *Int J Oral Maxillofac Surg* 2008; 37(3):209-14.

51. Perry M, Dancey A, Mireskandari K, Oakley P, Davies S, Cameron M. Emergency care in facial trauma--a maxillofacial and ophthalmic perspective. *Injury* 2005;36(8):875-96.
52. Norda AG, Meyer-Rüsenberg HW.[Experience with orbital implants in particular with porous hydroxyapatite materials]. *Ophthalmologie* 2003;100(6):437-44.
53. Chalasani R, Poole-Warren L, Conway RM, Ben-Nissan B. Porous orbital implants in enucleation: a systematic review. *Surv Ophthalmol* 2007;52(2):145-55.
54. Ye EM Psychological morbidity in patients with facial and neck burns. *Burns* 1998; 24(7):646-8.