

Suicide By Hand Grenade: Case Report

EL BOMBASI İLE İNTİHAR

Zerrin ERKOL, MD,^a Mustafa Ercüment AKSOY, MD,^b
Mehmet Akif İNANICI, MD,^b Hayri ERKOL, MD^c

Departments of ^aForensic Medicine, ^cGeneral Surgery, Abant İzzet Baysal University İzzet Baysal Faculty of Medicine, BOLU
^bDepartment of Forensic Medicine, Marmara University Faculty of Medicine İSTANBUL

Abstract

Deaths from explosive substances or devices are encountered in both civil and military circumstances. On the other hand anomic suicides with explosives (except living bomb cases) are very rare in forensic pathology. In this report, a male army officer who was found dead in his residence is presented. Crime scene investigation revealed that death was the result of impact from solid fragments originating from a hand grenade. There wasn't any sign of a forced entry which supported that the deceased was alone at the time of explosion. With the manner of death, the appropriate collection of physical evidence at the scene of explosion, suicidal letter had been written on the back sides of two photographs by victim, external and internal examination proofs of the corpse, was decided to be a suicide.

Key Words: Explosions; suicide, assisted; attitude to death

Türkiye Klinikleri J Foren Med 2007, 4:37-40

Özet

Gerek sivil gerekse askeri ortamlarda, patlayıcı madde ve cihazlara bağlı ölümlerle karşılaşabilmekle birlikte, patlayıcı madde ile tek kişilik intihar olguları (canlı bomba olguları hariç), Adli Tıp açısından çok nadir olarak görülmektedir. Yazıda lojmanında ölü bulunan bir astsubay olgu sunuldu. Olay yeri incelemesinde, ölümün el bombası ve şarapnel parçalarının etkisi ile meydana geldiği tespit edildi. Olay yerinde içeri zorla girildiğini gösterecek herhangi bir zorlama bulgusu gözlenmedi ve patlama anında ölenin evde yalnız olduğu anlaşıldı. Olayın gelişimi, olay yeri incelemesinden elde edilen fiziksel deliller, ölenin el yazısı ile iki adet fotoğraf arkasına yazdığı intihar mektubu, cesedin dış ve iç muayene bulguları dikkate alındığında ölümün intihar orijinli olarak gerçekleştiğine karar verildi.

Anahtar Kelimeler: Patlayıcı ölümleri, el bombası, patlama

Suicidal explosions that lack a terrorist background are rarely encountered in forensic pathology. The investigation of explosion-related fatalities can be a substantial challenge in medicolegal casework. Determining whether the manner of death is a suicide, a homicide or an accident in such cases can present a difficult task for the forensic pathologist. In this study the pathologic features of suicidal death, by hand grenade without a terrorist background, were considered and discussed with the literatur.

Geliş Tarihi/Received: 21.09.2006 **Kabul Tarihi/Accepted:** 13.11.2006

This paper was presented as a poster presentation in "2nd Annual Meeting of the Balkan Academy of Forensic Sciences" June 3-6, 2004, Serres-GREECE.

Yazışma Adresi/Correspondence: Zerrin ERKOL, MD
Abant İzzet Baysal University
İzzet Baysal Faculty of Medicine
Departments of Forensic Medicine, 14280, BOLU
zerrinerkol@gmail.com

Copyright © 2007 by Türkiye Klinikleri

Türkiye Klinikleri J Foren Med 2007, 4

Case Report

The deceased is a 28 years old noncommissioned male officer and was last seen alive 8-9 days before the body was found in his flat provided by army.

A few months ago, he had a baby (son). His wife and baby were out of the city, staying with his mother in law. He was living alone. His relationship with his wife was not very well. His wife never called him. In fact, his elder sister could not reach him through calling. She wanted his commanding officers to check his house. They could not get in through the door, so they entered from the balcony by breaking the door. A court claim was found at home which indicated that he had some debts. He was using sedative medication and had a nurse lover.

Since all the other apartments were empty in the block, nobody heard any explosion. Retrospective and inclusive search was done, but nobody had

heard any sound. Exact time of death could not be determined.

Crime Scene Investigation

The house was the first building which was located 40 meters away from the main street. The other flats were empty.

A full shell with a deformed tip of 7.65 mm diameter was found near kitchen door. In the living room, the deceased was found lying in prone position (Figure 1). A handgun was found between his right hand fingers and right side of his neck. Live worms were found on the brain tissue and on his hair and bones. A 7.65 mm. diameter shell was found at 40 cm away from his head. Additionally, a security pin of hand grenade was found 40 cm. away from his head. Also another security cantilever of a hand grenade was located 50 cm away on his left side. An unused defence type hand grenade with a closed security pin was found under the coffee table. Security of the gun was open while the cock was ready to shoot; its cartridge case and barrel were not moving due to dried blood and tissue parts. When it was cleaned with solvents, cartridge case was found to be empty while one 7.65 mm bullet was found at the ejection port.

Brain tissue, hair and skin parts were found on the inner surface of the apartment door beginning from the entrance, on doorway and living room walls and on the ceiling (Figure 2). Likewise due to stuck bomb splinter parts, 20-30



Figure 1. Situation of the body at the time of police arrival.



Figure 2. Brain tissue, hair and skin parts on the inner surface of the apartment door beginning from the entrance, on doorway and living room walls.

pieces of plaster holes with 2-6 cm diameter on the walls were seen. Both large and small parts of the skull, wrist and finger bone mixed with blood were split everywhere mainly on the right side of the body. Likewise bomb splinter parts covered with blood were observed in the hallway and living room.

Two photographs were found on the armchair with 50-60 cm away from the body. On the back sides of the photographs, a suicide letter beginning with "Dear Son" and telling how he earned his own life and that he was committing suicide with his own will, could be read. Numerous empty beer bottles and cans were found in the other living room and kitchen. All the house seemed to be untidy and dirty. Tape cassettes located on upper left corner of the body were broken; similarly windows of the living room were broken too.

The face of the deceased was totally damaged and the brain was out of the skull. Left hand was imputed beginning from its upper wrist part while revealing front arm muscles and bones. There wasn't any bullet near the body.

Autopsy Examination

The deceased was determined to be 1.76 meter tall and weighting 70 kilograms. All the body were x-rayed. Metallic images which seemed to be bomb splinters of 3-10 millimeters diameters were

discovered in the head and the left part of the chest and arm. However neither a deformed nor a regular bullet was not found.

It was observed that a large bony defect was present in right temporal and occipital region.

35-40 skin defects with 0.5-2 cm dimensions were discovered over front upper chest, left shoulder and left arm area. Four bomb splinter were found in left lung lobes. There was no traumatic lesion in abdomen region (Figure 3).

It was concluded that the death was caused by explosion of a hand grenade.

Ballistic experts mentioned that he might have firstly tried to suicide with the gun, but then he might have thrown away the deformed and full shell since the gun did not operate regularly.

Discussion

Deaths from explosive substances or devices are encountered in both civil and military circumstances. Civil cases are generally industrial incidents or detonation of chemical factories or ships.

Death and injury from explosives can be caused by several mechanisms. These can be by blast effects, projectiles from the explosive devices, impact from surrounding objects and debris impelled by the explosion, burns from hot gas and incandescent objects, secondary injuries from falling masonry, beams and furnishings.¹⁻³



Figure 3. The corpse with a large bony defect in right temporal and occipital region.

The localised severe trauma in left hand and mutilation of the head obviously indicates that the deceased was holding the hand grenade with his left hand or was very close to it at the time of detonation.

Air-containing organs, such as the lungs, are especially susceptible to the high pressure wave which advances from the seat of the explosion at about the speed of sound.⁴ Subpleural patches of purple red colour which are often scattered at random but occasionally cross the lung surface in the line of ribs could be found.^{5,6} The shock wave can also cause foci of haemorrhages in gastrointestinal system. At the autopsy there wasn't any lesion that would remind a blast effect although the deceased was holding the grenade probably because the energy of the explosion was insufficient for such an injury.⁷

In this case the death was the result of impact from solid fragments originating from the hand grenade. There were numerous bruises, lacerations, and abrasions on front upper chest, left shoulder and left arm.

There wasn't any evidence of forced entry and accompanying toolmarks which supports that the deceased was probably alone at home.

There was an another unexploded hand grenade at the crime scene which was safed by military officers.

There is always a necessity of differentiating an accident and a suicide. A terrorist attack may be initially suspected in each case of suicide involving explosives.⁸ A team of experts is necessary in each case. The appropriate collection of physical evidence at the scene of explosion and a detailed examination of the victim's history is as important as documentation of injury patterns and recovery of trace evidence at autopsy.

The death of the military officer was regarded as a non-terrorist explosive related death.

The manner of death was decided to be a suicide after evaluation of the the crime scene evidence, the autopsy findings and witness reports.

REFERENCES

1. Knight B. Forensic Pathology PA: Edward Arnold 1991. p.248-51.
2. Mason JK. The Pathology of Trauma. PA: Edward Arnold London: 1993. p.86-95.
3. Spitz WU. Thermal Injuries. In: Spitz WU ed. Medicolegal Investigation of Death. Charles C, Thomas 3rd eds. Springfield: 1993. p.442.
4. Mason JK. Forensic Medicine. An Illustrated Reference. Chapman and Hall Medical 1993. p.106.
5. Fisher BAJ, Block S. Techniques of the Crime Scene Investigation. CRC Press Boca Raton 326-7.
6. Clark MA. Autopsy Guidelines for Explosion Fatalities. In: Froede RC ed. Handbook of Forensic Pathology. College of American Patologists 1990. p.206-13.
7. Karger B, Zweihoff RF, DuChesne A. Injuries from hand grenades in civilian settings. Int J Legal Med 1999;112: 372-5.
8. Siciliano C, Costantinides F, Bernasconi P, Nunno N. Suicide using a hand grenade. J Forensic Sci 2000;45:208-10.