

HOMICIDE SIMULATING ACCIDENTAL

D. K. Sharma*¹ and Dr. Asha Verma²

¹S.S.O. and A.C.E. to the Govt of M.P. District Scene of Crime Unit, Bhopal, (M.P.), India.

²Professor, Department of Chemistry, Govt. Science and Commerce P.G. College Banazeer, Bhopal.

Article Received on
19 April 2017,

Revised on 10 May 2017,
Accepted on 30 May 2017

DOI:10.20959/wjpr20176-8189

*Corresponding Author

D. K. Sharma

S.S.O. and A.C.E. to the
Govt of M.P. District Scene
of Crime Unit, Bhopal,
(M.P.), India.

dksharmafsl@gmail.com,

dr.ashaverma@ymail.com.

ABSTRACT

Burns are injuries produced by the application of dry heat, to the surface of the body. It may be epidermal, dermo-epidermal or deep burn, according to the nature of their severity. Homicide by electricity, through extremely rare, is quite possible. Death by electric currents are mostly accidental. A contact burn is due to close contact with an electrically “live” object with voltage. The human body, is a bad conductor of electricity, though the resistance varies in different tissues. Blood vessels and muscles are very good conductors as they contain considerable water. High voltage causes a violent muscular contraction and the person may immediately be thrown away from the source of current, which may result in death. The degree of damage to tissues is proportional to the quantity of electricity flowing through

them per unit time. It is important that electrocution deaths thoroughly documented and investigated for safety prevention and compensatory reasons. According to the locard's principle, when a criminal and / or his instruments of crime come in contact with the victim or the objects surrounding him, they leave traces. Likewise, the criminal and / or his instruments pick up traces from the same contact. Thus, a mutual exchange of traces takes place between the criminal, the victim and the objects involved in the crime. If these left over traces are identified to the original source viz., the criminal or his instruments or if the picked up traces are linked with the victim, the scene or the objects around the victim at the scene, they establish the contact and pin the crime on to the criminal.^[1] If burns are caused by heated solid surface, the skin is blackened. Accidental cases are very common, especially among women and children on account of view negligence.

KEY WORDS: Homicide, Accidental, Rigor Mortis, Electrocution, Voltage, Ligature.

INTRODUCTION

Cases of death from electric shocks occur in those cities where electricity is used for lighting and motive purposes. This is due to short circuit or the workman may grasp the ends of a live wire. The effects of an electric shock is estimated by the formula.

The effect = (voltage×amperage×duration) – tolerance and alertness.

High voltage or very low voltage with high amperage currents are dangerous to life. Alternating currents are considered more dangerous than direct currents as they are liable to cause sweating and tetanisation of muscles. Usually in India the domestic electric supply is about 220-240 volt, alternation current of 50 cycles per second, and most electric motors are run at 400 volts or more. There is no danger of fatality below 50 volts. In fatal cases the victims were well “earthed”. Blood vessels and muscles are very good conductors as they contain considerable water². High voltage causes a violent muscular contraction and the person may immediately be thrown away from the source of current, but low voltage may cause spasms in the muscles and the affected person may continue to hold the conductor for sometime, which may result in death.

The severity of an electric injury, in general, is directly proportional to the duration of the current flow. Typical burns are usually found at the points of entrance and exit of electrical current, as at these points, the skin offers resistance and the electric energy is changed in to varying degree, of intense heat. It is important that electrocution deaths be thoroughly documented and investigated for safety, prevention and compensatory reasons. A message was received from Police Control Room Gwalior that a lady died due to electric shock while she was cooking her meals/heating water on an electric heater.

At Crime Scene

At the scene of crime the deceased was found lying on the floor. There was Rigor Mortis present on the whole body. Her neck was found tilted towards the left, eyes were closed, mouth was open. The right hand was bent from the elbow and was pointing upwards and the fingers were pointed inside. Left hand was bent from the elbow and the fingers of this hand were kept on an electric heater found at the spot (Fig-1). The left leg of the deceased was straight and the right leg was bent and found a little crooked. Froth mixed blood was found oozing out from the nostrils of the deceased and blood like substance was coming out from

the mouth. There were dark brown colored circular marks (ligature) on the deceased neck. Near the deceased neck and scalp hair were found small fibers of coconut/jute (Fig-2). There were injury like marks near the neck, on the chin and on the cheek. There were small fibers of jute/coconut found near the legs of deceased. The clothes found on the body were in a state of disorder.

An electric heater was found at one place at the scene of crime. There was no current in the electric heater at the time of spot inspection, but the wires of the heater were found plugged to the switch board. At the time of inspection there was no evidence of cooking material (ie: Atta, Chakla, Belan, Utensils and Water) found on the spot.

Findings

The following facts were evident after the spot inspection.

1. Deceased was habitual of working with her right hand but her left hand was found placed on the heater.
2. Circular ligature mark was found present on the neck of the deceased.
3. Presence of fibers on and around the neck, scalp hair and blouse of the deceased.
4. Charring on fingers.
5. There was no entry or exit point (current).
6. Clothes found on the body were in disorder state.
7. No utensils or cooking material being found near the heater or on the spot.
8. The incident was reported to have occurred at 5.00 A.M. but at the time of spot inspection (9.20 A.M.). The whole body was in a state of *rigor mortis*.

RESULT AND DISCUSSION

A person may be killed by throttling or poisoning. The dead body may then be burnt to conceal the crime and to make it appear like death from electrocution. Even under such circumstances, a careful spot (scene of crime) inspection settles the issue. A careful searching of spot provides valuable clues and clearly indicates whether its a Homicidal, suicidal or accidental case. The differentiating features of antemortem and post mortem injuries, as well as evidence in respiratory tract and blood provide valuable clues. Chemical analysis of viscera also help. Sometimes, determination of cause of death may present an extremely difficult problem.

The examination of the scene, the wiring, and position of any electrical apparatus in relation to the deceased are of vital importance. The outlet into which the appliance was plugged should also be checked with a circuit tester. Normally, the current flows from the supply wire into an appliance, causes it to operate, and returns through another wire. The coverings of the appliance and its wires separate the individual from the electric current. However, if the coverings of the apparatus or its wires are defective or if the skin is wet, eg. when a person is taking bath, and accidentally comes in contact with the defective appliance or touches the wire, or a heater falls in the bath, a pathway is opened up for electricity to pass from the supply wire into the person and thence to the ground, instead of returning by way of another wire in the usual manner. The result is electrocution. Once this concept is understood, the investigation and evaluation of electrical injuries becomes much simple.^[3]

There are three kinds of electric burns, viz, (1) contact burns. (2) spark burns, and (3) flash burns depending on the nature of contact and strength of the current. A contact burn is due to close contact with an electrically “live” object with domestic voltage. The damage varies from a small and superficial injury to charring, depending upon the time, the contact is maintained. In electrocution death may result from instant shock due to vagal inhibition. With domestic supply, it usually results from ventricular fibrillation.



Fig: 1



Fig: 2

CONCLUSION

On the basis of the presence of fibers, circular ligature and other corroborative evidence, this incident was found not to be of an electric shock but a case of suspected homicide. After spot inspection, investigating officer was advised to investigate the case as homicide, not as an accidental. A case of homicide was further confirmed by the post mortem report. On the basis of spot inspection, findings by the scene of crime mobile unit (FSL) Gwalior, a case of murder was registered.

REFERENCES

1. Forensic Science in Criminal Investigation and Trials by B.R. Sharma. Fourth Edition.
2. Modi's Medical Jurisprudence and Toxicology, 22nd Edition, butter worth India, (1999).
3. Parikh's Text book of Medical Jurisprudence, Forensic Medicine and Toxicology, 6th Edition.