Alleged Murder, Uncovered the Mystery as Suicide: A Crime Scene Investigation Case Study
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DOI: 10.36348/sijlcj.2022.v05i06.001 | Received: 18.04.2022 | Accepted: 30.05.2022 | Published: 02.06.2022

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Abstract
The primary goal of every investigation is to find out the actual truth of any fact and prove or disprove any allegations with the help of scientific evidence according to the law. This case study is an excellent example to understand the crime scene investigation for forensic and law enforcement professionals, especially in the burning cases. The background of the present case is that one 18-year-old girl was admitted to a Government hospital in West Bengal, India, with 68% burns injuries at night. The hospital authorities informed the police about the matter. Accordingly, the local police rushed to the hospital and recorded the statement of the victim girl. A case was registered by the police against the unknown miscreant in the local police station on the basis of the statement of the victim girl. Three days later the victim girl died from his injuries. The case was amended under section 302 Indian Penal Code. On requisitioned by the Deputy Commissioner of Police, a forensic team under the leadership of the author (TKMukherjee) visited and examined the crime scene and unvears the actual truth.

Keywords: Forensic Science, Crime Scene Investigation, Physical Evidence, Case study, Burning, Suicide case.

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1. INTRODUCTION
Crime scene investigation is a very important part of any investigation. It is the meeting point of science, logic and law. Crime scene investigation is a long, tedious process that involves useful documentation, photography or videography of the situation or condition on the scene and position of the evidence. The collection of any physical evidence that would possibly remove the darkness and illuminate what had happened and point to how and who did it.

The investigation begins at the crime scene with the identification and recovery of physical evidences. After analyses and evaluation of the results of recovered physical evidences, it proceeds to the presentation of all the findings to the court. From the first responders to the end-users of the information, all entire personnel should have an adequate understanding of the forensic process. Crime scene investigation is a process aimed at recording the scene because it is the first encounter, identifying and collecting all the physical evidence relevant to the solution of the case.

Many times, deaths caused by poisoning, drowning, hanging, or strangulating are followed by burning to simulate the crime as suicidal/accidental burning. While investigating burning cases, it is imperative to carry out a thorough search of the scene of occurrence and evaluate the physical evidence to determine whether the death was due to homicidal or suicidal, or accidental burning. In the case of antemortem burning, soot particle in the trachea is an important indication to prove the point. Due to inhalation of carbon monoxide, the blood would contain carboxy-hemoglobin, and the color of the blood changes from dark brown to cherry red.

Due to the lack of scientific knowledge of the investigator regarding the proper collection, preservation, storage, and transportation of crime scene evidences, prevent to obtain appropriate analyses and results and finally diminish its value before the court of law.

2. Reported fact according to the statement of victim girl
The statement of the victim girl was that, at about 03.00 hrs when she was sleeping with her sisters, she heard the sound of knocking on the main door of her flat. Then she woke up and opened the wooden
entrance door. The collapsible gate at the entrance was closed at that time. After opening the main door victim saw through the gap of the collapsible gate that one unknown person wearing a black cap was standing in front of the door. Seeing the unknown person she was about to close the door and at that time the unknown person threw some liquid on her backside resulting in her backside ablaze. Hearing the scream of the victim, her parents came out of their room and extinguished the fire with the help of water, and with the help of the neighbor and family members, she was removed to the hospital and admitted to the female burn ward. Three days later the victim girl succumbed to her injuries. Over the statement of the victim girl, this case was registered in the local police station against the unknown miscreant’s u/s 302IPC.

3. Information & evidence collect by police:

During the investigation, police seized burnt wearing apparel of the victim from the place of occurrence. Several witnesses including the family members, neighbors, and friends of the victim were examined. Investigation revealed that the victim was a student of class XI. The victim has four sisters and one elder brother. All sisters and elder brothers used to sleep in one room and their parents used to sleep in another room in their flat. Police collect the post-mortem examination report where the autopsy surgeon opined that the death was due to the effects of burn injuries ante-mortem in nature.

4. Forensic Crime Scene Investigation and Discussions:

4.1 Description of the P.O

The P.O was a four storage building and the incident had happened inside a south opening two rooms flat located on the 3rd floor. The rough sketch of the flat is given below (not to scale).

4.2 Observation and examination:

- The said flat consisted of two rooms, one kitchen, and one toilet cum bathroom. The only entrance/exit gate consisted of one metallic collapsible gate and one ply-board door.
- The corridor from the entry gate to the northern side bedroom having a dimension of ~12.5 feet x 4 feet, where the incident reportedly took place was examined. The said corridor was found to be apparently clean. On the eastern side of the corridor, one blue-colored old metallic almirah having no door was kept. The almirah was found to be used as a shoe rack and was found kept ~3feet away from the only entrance/exit gate of the flat.
- Some black-colored burnt tiny sticky depositions appeared to be deposition of synthetic clothing materials were observed on the floor of the said corridor on the eastern side of corridor located in between the gap of the metallic almirah and wooden door panel.
- The team used the ALS (455 nm. Alternative Light Source with yellow filter/barrier). Some oily deposition characteristics of Hydro-Carbon deposition were found on the eastern side of the floor of the said corridor at a distance of ~2.5 -3 feet from the entry/exit door even at the lower portion of the eastern side wall at a height of ~8 inches from the floor.
- No any others significant depositions of Hydro-Carbon could be observed neither on the interior side nor on the exterior side of the single panel wooden entry/exit door. No
significant impression could be observed on the metallic bar of the collapsible gate.

- The CCTV footage in the vicinity of the victim’s flat was checked and none was seen to enter or exit the building during the relevant period of the fateful night.
- The forensic team also examined the burnt clothes of the victim girl which were collected by the police from the place of occurrence and found a smell like kerosene oil.

4.3 Revealed from the crime scene:

i. Considering the above observations, it could be concluded that a fire incident took place inside the eastern side of said corridor located in between the gap of blue-colored almirah and door panel as evident from burnt sticky items and deposition of oily substances at places.

ii. The fire was localized in nature with a low degree of flame as evident from the absence of carbon particles on the ceiling and peripheral walls.

iii. Considering the location and height of the deposited oily substance as mentioned above the examination revealed that the victim girl might be tried to commit suicide by setting fire by using any inflammable substance at the above-mentioned place of the corridor in sitting condition.

5. The real fact comes out after forensic examination:

The real fact of the incident has come out after the crime scene investigation of the forensic team. The real fact is that the victim’s father has a grocery shop on the ground floor of the said building and the victim used to sit in the said shop in absence of his father at that time his boyfriend used to come to shop and meet with the victim girl. Thus, a relationship developed between them. The victim girl used to talk over the phone frequently and also meet with her boyfriend in different places in their locality (as per the statement of local witnesses). On the fateful night victim made the video phone call to her boyfriend at about 12.00 midnight and they had conversed for about 40 minutes. After a few hours, the incident fire took place. Later the father of the victim girl confessed that two burnt match sticks along with one matchbox and one partially filled jar of kerosene oil (which was kept in the kitchen by rapping polymer sheet) were found near the almirah. He suppressed the fact of thinking about the future of his other daughters. Local police closed the case without arrest so far.

6. CONCLUSION

The present investigation concluded with a finding, based on crime scene evidence, crime reconstruction, statements of witnesses, and autopsy examination report that the cause of death as suicide, and ruled out the homicide, as alleged by the relatives. The findings highlight the importance of keen crime scene observation in the place of incident and which mysterious situation the fire took place is also stated clearly.

ACKNOWLEDGEMENT

We acknowledge the support from the Government of West Bengal in terms of infrastructures and manpower. The authors also thankful to Forensic Sciences Department and Police Department, West Bengal, India for their confident and trust on the corresponding author’s crime scene investigation of mysterious burning death case. Thanks to the general people who have cooperated during the crime scene investigation and also accepted the forensic findings.

Ethical Standards:

All data/information used in this study were collected maintaining all legal formalities and the crime scene investigation method has been used according to the guidelines mentioned in the Directorate of Forensic Science Service- India. This study did not disclose the identity of anybody by any means.

Conflict of Interest: None

Source of Funding: None

REFERENCE