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## Murder Masqueraded In Flames: A Case Report

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# Abstract

Fire has been linked to human civilization since time immemorial and its novel and sinister use has been known to men of all class & creed. An attempt was made to masquerade a crime using fire but a meticulous autopsy and watchful eye of forensic expert unearthed the hidden mystery. A partially charred dead body of a middle aged male individual recovered from a village in southwest haryana was brought to the mortuary of PGIMS, Rohtak with suspicion of ante mortem suicidal burns. Postmortem examination revealed post-mortem burns and fracture of hyoid. **Keywords:** Fire, Flame, Charring, Postmortem.

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## **INTRODUCTION**

Homicide is defined as killing of a human being by another human being [1, 2]. Time and again criminals have found ingenious weapons of destroying evidence of their crimes, and one of the mostly easily available such weapon is fire. Throughout history fire has had a varied symbolic significance to human civilization [2, 3]. Since time immemorial its novel and notorious aspects of its use has been known to men of all class & creed. Here once again an attempt was made to masquerade a crime using fire as a tool of destruction of corpus delicti. However, a meticulous autopsy and watchful eye of forensic expert unearthed the hidden mystery.

#### History

A partially charred dead body of a middle aged male individual recovered from a village in southwest haryana was brought to the mortuary of PGIMS, Rohtak with suspicion of ante mortem suicidal burns. As per the statements of the neighbours the deceased was a 45 yr old Male individual with poor financial condition living alone in a small room of an old house in his ancestral village. He was unemployed and his family had abandoned him from past few months. His neighbours used to pity on him and gave him some food to eat at times. In the evening when neighbours came back from work, they noticed smoke & flames coming out of the room and quickly doused the fire. Inside the body of deceased was present in a partially charred state. Immediately police was informed who recovered the body for post-mortem examination. Photography of scene of crime was done by police.

#### Post mortem examination

The dead body was wrapped in white plastic sheet. It was emitting cooked meat smell. Pieces of burnt off clothes were loosely anchored at places along with the body. Length of the body was 170 cm. The body was charred sparing patches of skin on right side of face, right lateral pectoral region and right axillary region, part of dorsum of right forearm, parts of lateral aspect of lower right thigh and dorsum of right foot (Figure 1).

There was no red line of demarcation present between burnt and unburnt area. Scalp hair, moustaches, beard, body hair and pubic hair were singed off at places. The body was showing heat rigidity where the deep burns and charring was present. The left forearm and left hand was found detached from the body at left elbow joint and was received along with the body. The marginal tissue was burnt off exposing the upper part of both bones of forearm. Genitals were burnt off and only the charred stump was present. Burnt area over the body was showing blackish charcoal like appearance without any sign of vital reaction between the spared and burnt area.

On examination of neck region superficial burns were present involving the epidermis and dermis sparing the underlying muscles of neck. (Figure 2) On exploration and layer dissection of neck, ecchymosis

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was seen in strap muscles and upper part of larynx and thyroid cartilage and their surrounding muscles and base of tongue. On further exploration, right greater cornu of hyoid bone was found fractured inwardly with fractures ends showing infiltration of blood in the bony trabeculae. (Figure 3) On further dissection lumen of larynx and trachea was devoid of any carbonaceous soot particles deposits. Pupil on right side was dilated and cornea was hazy, whereas those on left side were burnt off. All the solid organs were found congested on cut section. A metallic bottle cap was received along with the body in the plastic sheet which was sent along with cloth pieces for detection of inflammable material to FSL. It was opined that the cause of death in this case was asphyxia consequent to compression of neck. The burns described were post mortem in nature.



Fig-1: Showing partially charred body with no line of redness between burnt & unburnt areas

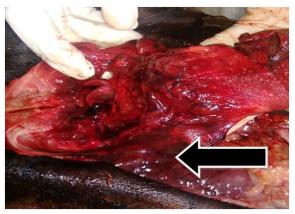


Fig-2: Showing ecchymosis in neck muscles

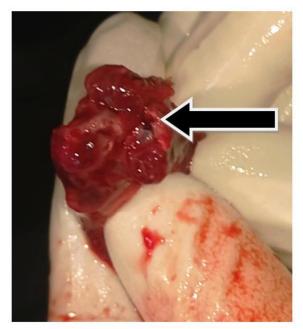


Fig-3: Showing infiltration in the fractured end of greater cornu of hyoid

### DISCUSSION

Since the 17th century it has been well recognized that the human body can be partially or almost completely burnt away and the surrounding environment shows little evidence of burning [4]. Although this phenomenon uisually seen indoors, it can rarely occur in an outdoor setting. Fires in confined spaces such as a room can produce a phenomenon called a flashover, often involving a gas heater or device. Once a fire starts, it produces radiant heat, hot gases, and smoke. Self-immolation is dramatic death by fire, and mainly occurs in adults between the ages of 20 and 40 years, who are suffering from significant mental disorders or with a history of alcohol or substance abuse.<sup>5</sup> Suicide attempts usually pour a flammable liquid on themselves, generally gasoline, and set themselves on fire. The liquid container and matches or lighter are usually present at the scene. Generally, such suicidal attempts present third- degree burns over most of their body, with the burns concentrated on the front part of the body [6]. Evidence of survival is dependent on the documentation of all potentially fatal injuries and examination of individuals overcome by smoke inhalation will usually reveal soot in the nostrils and mouth as well as coating the larynx, trachea, and bronchi. Soot particles and other thermal injuries indicate that the patient was breathing in fire. Absence of soot particles does not prove that the patient was already dead when the fire started unless there is reasonable evidence that the fire was not a flash fire [7]. Introduction of soot into the trachea, either during incision on the charred neck at autopsy or by disintegration from burning, gives the false impression of smoke inhalation [8].

The available history pointed towards a suicidal manner of burns and the same was presumed by the police in their inquest. However, presence of metallic bottle cap and photographs taken by police were suggestive of use of accelerant for fire and it was very unlikely that a person who did not have anything to eat would get an accelerant to burn him or cook food in his room where no stove or utensils were present. The suspicions were further aggravated by the distribution of burns, lack of history of alarms raised by the deceased before his death and unawareness of fire by neighbours in middle of a populated village. Similar cases of firearm injury in charred bodies have been reported at PGIMS Rohtak few years back.

### CONCLUSION

Sometimes there is no proper history about the case but as forensic medical expert it is our duty to be utmost vigilant in cases where history is ambiguous and a thorough autopsy should be conducted not only to look for hidden injuries but also to confirm the nature and manner of injuries that present to the naked eye to aid in justice.

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