

CASE REPORT

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Suicide With Associated Acts of Arson: Two Cases from Colorado

ABSTRACT: We report on two cases of suicide in which the victims started fires before their deaths. In one case the victim died of a single self-inflicted gunshot wound to the head after setting several fires in his residence. In the second case the victim hung himself after setting several fires in his residence and an adjoining building. In both cases, the victim's position was not near the origin of the fires suggesting that the arson was not a failsafe device to the primary mechanism of suicide. Neither victim showed a significant percentage of carboxyhemoglobin, or thermal damage from the fires. Both cases are remarkable in that, had the fire caused more damage to the remains and dwellings, a finding of suicide may not have been reached. We discuss similar aspects between the two reported cases and discuss differences observed with similar events such as complex suicide, suicide by self-immolation, and concealed homicide by burning. Similar cases should be reported to broaden our understanding of these complex events.

KEYWORDS: forensic science, arson, suicide, complex suicide, self-immolation, staged death, death investigation

Planned complex suicides can be defined as the application of more than one mechanism of death to ensure a fatal outcome (1,2). Complex suicides can be further divided into primary and secondary categories depending on the time delay between the employed suicidal mechanisms (1). Although rare, these suicide events can present several challenges to the criminal investigator. The burning of the body and surrounding scene can damage or destroy valuable evidence generally relied upon to aid in determining the manner of death. Fire suppression efforts by responding fire fighters can also cause significant damage and displacement of evidentiary items such as firearms and ballistic evidence. In addition, extensive fire damage to the body and structure may prevent an accurate trajectory analysis of fired projectiles. Suicide by self-immolation has been reported by several authors (3–7). In addition to motives of suicide, self-immolation has been employed as a means of political protest, religious or cultural ritual, and punishment. Several authors report a significant presence of psychological disorders present in subjects attempting or succeeding in self-immolation (4,5). These reports also indicate a higher percentage of women than men engaging in this behavior.

Fire as a means of concealing homicide has been reported. Suarez-Penaranda et al. (8) report two cases of homicidal ligature strangulation concealed by arson. In both cases the victim was set afire and the ligature was left in place around the victim's neck. Both victims were severely burned. The authors reported that the ligature helped to protect and preserve that portion of the neck. Had the ligature been removed, the neck tissue may have been more severely burned, complicating the determination of strangulation at autopsy.

Homicidal burning is similar to suicide by self-immolation in that the fires are associated with the victim's bodies. However, when fire is employed for reasons other than suicide or concealment of a crime, the point of origin may not be associated with the final position of the victim's body. Accidental fires may also have a point of origin which is disassociated with the victim's dying position. Uncovering the mechanisms which started the fire should allow investigators to quickly differentiate accidental fires from acts of arson.

In March 2005 two unrelated suicides with associated events of arson occurred in the state of Colorado. In both cases, the arson event, while contemporaneous to the suicide event, appears to have a purpose other than ensuring a fatal outcome. In both cases the fires were extinguished before the body was subjected to heat and flame damage, which greatly assisted investigators. Had the fires severely damaged the bodies and surrounding structures, a finding of suicide may not have been possible.

Case #1

In March 2005 a neighbor called 911 to report smoke coming from the victim's residence. Firefighters responded to the residence within minutes and began fighting the fire, which was located at the south end of the ranch style house. A two-man entry team forcibly entered the residence through the locked front door. The front door consisted of a simple door knob with a turn lock on the inside handle. Upon entering the residence the firefighters reported heavy smoke from the ceiling to *c.* 6–8 in. off the floor. The lead firefighter felt along the back of a couch, which ran perpendicular to the entry way. At the end of the couch he felt what he believed to be form of a human head. He attempted to lift the seated victim from the couch but was unable to do so. The second firefighter assisted and the sectional couch was knocked over in the process of removing the victim. Arriving at the doorway the fire commander ordered the firefighters to stop

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and place the victim on the floor inside the doorway. At this point the fire personnel noticed an apparent through and through gunshot injury to the victim's head and the lead firefighter's bunker gear was "covered" in blood. The 50-year-old victim was pronounced at the scene and left in place for crime scene personnel. Subsequent investigation by arson investigators revealed that the origin of the fire was in the victim's bedroom at the opposite end of the house. Gasoline had been poured over the victim's water bed and trailed into the adjacent closet. Several Coleman propane fuel canisters had also been placed in several locations in the bedroom and closet for additional fuel. All of the windows in the residence were closed but the attic access panel had been propped up.

A home office was situated between the victim's bedroom and living room in which the victim's body was found. Numerous pages of that morning's newspaper had been piled in a "pyramid" shape below the home computer table with associated Coleman fuel canisters. The room also contained large amounts of ammunition, black powder, and reloading equipment. None of the black powder was used as fuel for the fire. It was apparent from the newspapers that the victim intended to have a fire in this room as well. Either because of a (perceived or real) lack of time, or in accordance with his intentions, no fire starting was attempted in this room. Hand loads of the same caliber and cartridge casing type found in the victim's revolver were also found in this room.

The victim died of a single gunshot wound to the head from a large caliber handgun. The entrance wound was on the right parietal area above the ear and traveled horizontal and rearward exiting the left parietal area above and behind the left ear. Soot and unburned powder was observed in the entrance wound indicating a close contact with the weapon. There was no significant presence of soot in the victim's airway. Toxicological analysis indicated that the percentage of carboxyhemoglobin was less than 5% saturation. The victim's blood alcohol level was less than 0.003 g/100 mL, and the urine indicated the presence of cannabinoids. Other than the gunshot wound, there was no other visible injury to the victim, and no defensive wounds were present. The bullet was recovered from a wall in the living room c. 3 ft 8 in. up from the floor. Indentations in the carpeting as well as blood draining and pooling on the couch and floor allowed for an accurate placement of the couch sections at the time of blood loss. Based on the observations of the firefighters and the blood staining on the victim's clothing and couch it was determined that the victim shot himself from a seated position on the couch. The trajectory of the bullet hole in the wall was consistent in originating from this location. A .45 caliber single action *Ruger Vaquero* revolver was found on the floor next to the position of the victim. The cylinder contained five live cartridges and one expended cartridge casing. The hammer was down over the expended casing. The victim was confirmed by friends and family to be right handed.

Before his suicide the victim performed several acts that strengthened the investigators findings of suicide. Approximately 3 days before his death the victim sent individual "care packages" to his two brothers and his mother through the mail. All of the relatives lived on the East coast. The packages contained family heirlooms and sentimental items apparently chosen specifically for each recipient. In addition, on the morning of his death the victim drove to a friend's house and dropped off his dog with written instructions to care for the animal. Neighbors, family, and friends said this act was very unusual in that the dog was a very close companion and the victim rarely traveled anywhere without

it. They also stated that the victim had never before asked any of them to watch his dog for any length of time.

The victim had been unemployed for c. 1 year and was close to exhausting his retirement account, which he had been living on. The victim had no documented history of mental disorder. There was no indication that the victim had made previous attempts of suicide. The victim did have plans to go camping over the weekend with friends. This was reportedly a fairly common practice. While processing the scene, one of the victim's friends arrived to pick him up for their camping trip. A partially completed hand written note to the friend whom the victim entrusted his dog was found crumpled up on the living room floor. The house was in disrepair and was very cluttered. Several old cars were located on the property. The victim's ex-wife (divorced 20 years prior) was still a signatory on the dwelling and had legal rights to the property following his death. The ex-wife had not spoken to the victim in many years and was unaware of any trouble in his life.

Case #2

In an unrelated case, a 69-year-old male set three fires before hanging himself in his apartment in Aspen, Colorado (9). The victim was facing eviction from his subsidized housing unit for drug related activity and late rent payments. The victim lived alone and had a lengthy arrest record. There were reportedly no previous arrests for acts of arson. The victim was reportedly very unhappy about being evicted and had not determined alternative housing plans. At c. 02:30 h, the victim used gasoline to set fires in two separate buildings. The victim also disconnected a main gas line valve in his building apparently to increase the destructive power of the fire. Fires were located in a storage unit, on a sofa and chair in the main lobby, and inside his own residence. The fire set in his residence was not in the same room as the victim's position. A partially full 5 gallon gasoline can was found in the victim's apartment. Fire personnel responded to a 911 call within minutes. Sprinkler systems were automatically activated in the victim's apartment and extinguished the fire without significant property damage or loss of evidence. There was no evidence of forced entry seen to the victim's residence. The victim did not suffer any thermal damage, and had no observable defensive wounds. The victim's clothing was analyzed and determined to contain gasoline residue. Toxicological analysis revealed evidence of recent cocaine use with blood and urine benzoylecgonine concentrations of 213 and 21,270 ng/mL, respectively. Benzodiazepines were also detected in the urine. Analysis of the victim's blood revealed that levels of carboxyhemoglobin were negative. The victim's neck was remarkable for the presence of a ligature imprint that curved upwards behind the ears bilaterally. There were no other injuries reported on the victim. The victim did not have any documented history of mental disorder.

Discussion

Differentiating between planned complex suicide involving fire, suicide by self-immolation, and concealment of homicide by fire may pose several challenges to the crime scene investigator. In all three events the origin of the fire will likely be the victim, or in close proximity to the victim. The origin of any fire typically receives the most significant damage from heat and flame. Significant fire damage to the victim and associated structures in the scene may hinder reconstruction methods and complicate or prohibit a final determination of the manner of

death. The above two cases involve suicides in which the act of arson does not appear to be employed to ensure the victim's death. In Case #1, the victim apparently set the fire to destroy the house and its contents to avoid burdening family members with the disposition of property. In Case #2 the motive for the arson appears to be purely revenge for being evicted. In cases where there is a discontinuity between the point of origin and the victim's body the investigator should consider alternative motives for the arson other than homicide or concealment of another crime. This is especially true when there is significant fire damage to the victim or surrounding structure. Accidental fires may also present the investigator with similar crime scene conditions. Determining the mechanisms causing the fire should help to differentiate an accidental fire from a criminal act of arson. Similar cases should be reported to broaden our understanding of these unusual acts of suicide.

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