

Hit and Run Accident: The Mortality of an Innocent Push Hand Carter. Offender Identification Through Dent and Paint Marks. – Real Crime Scene Report

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Abstract:

Forensic Science not only includes laboratory analysis, but also includes crime scene investigation scientifically. It is a well-known fact that forensic science starts from the crime scene. Forensic investigators are facing challenges when they step onto the crime scene, particularly in scenes of mortality. Sometimes, the crime scene investigators are misled by the offenders through their criminal tactics, fabricating a homicidal scene as a suicidal scene and vice versa. Another challenging fatal investigation is hit-and-run road accidents, and data from the National Crime Records Bureau in India shows an upward trend in hit-and-run cases. The total number of fatalities in accident cases was 1,57,593 in 2018, while in 2022 it was 1,68,491. Physical evidence at the accident scene is the only clue that can be used to link the offender and the offence. The forensic crime scene investigator should be knowledgeable in recognising and locating transfer evidence for comparison with the suspected vehicles or persons in hit-and-run cases. The present hit-and-run case was investigated by the author during his career as a Government Forensic Crime Scene Investigator in India, wherein a push handcart was hit by an unknown vehicle on a town road in the early morning and ran away. The cart man was killed on the spot itself and the cart was badly damaged, found away from the dead body. The police registered a case under section 304(A) IPC (Hit and run), and the service of a forensic crime scene expert was requisitioned. The author visited and examined the scene of the crime, and identified the offending vehicle as a tractor through linking paint and dent marks on the tractor and handcart. The author also presented his testimony in the court and was finally sentenced by the Honourable Judge.

Keywords: Forensic Science, Crime Scene Investigation, Hit and run, Fatal road accident, Real crime scene report.

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Introduction

Forensic Science is an unavoidable and interesting science that provides answers in the courtrooms for justice. Hence, movie directors are using the technique of forensic science in solving the crime by the heroes and kindling the interest of the audience. Forensic science is an important tool for crime scene investigation and is used in almost all crime scenes, viz. burglary, homicide, explosion, fire, road accident, hanging, drowning, building collapse and many others (Nataraja, 2020). Forensic investigators are facing challenges whenever stepping onto the crime scenes, particularly in mortality scenes. Often, the crime scene investigators are misled by the offenders through their criminal tactics, as fabricating a homicide scene as a suicide scene and vice versa (Weyermann and Roux, 2021). Another challenging fatal investigation is hit-and-run road accidents, because the offending vehicle is unknown and the victim is found dead on the road. Road traffic accident is the most common mortality happening to road users in our day-to-day life (Vikas Kumar *et al.*). The data from the National Crime Records Bureau in India shows an upward trend in road accident cases. The total number of fatalities in accident cases was 1,57,593 in 2018, while in 2022 it was 1,68,491 (NCRB, 2023). The presence of physical evidence at the accident scenes is the only clue to link the offender and the offence (Nataraja, 2024). A road accident is generally caused unexpectedly by a collision involving a vehicle in motion and persons or another vehicle, resulting in injury or death. The cause of accidents is due to a lack of human care, and still pathetic that the offending driver runs away from the accident place, a sort of crime commission, punishable under law (Mohsin, 2022). Importantly, the forensic crime scene investigator must prove that the hit and run was committed by the particular driver forensically before the Magistrate in the courtroom (Nataraja, 2025).

The present case study, investigated by the author, is an example of a hit and run case, wherein a middle-aged man named Thangaraj, pushed his push hand cart on the road in the early morning around 3 am. Suddenly, Thangaraj was hit by an unknown vehicle under rash and negligence, killing him and ran away from the accident place with the vehicle. The dead body and the damaged push hand cart were found on the road. On the same day, a suspected tractor was seized and brought to the police station by the jurisdiction Police Inspector. I was requested to visit the crime scene and the suspected tractor for examination. Accordingly, the former Forensic Crime Scene Expert (Mobile Forensic Scientist), also the corresponding author, examined and identified this

tractor as the offending vehicle based on the physical evidence found at the crime scene, the tractor and the pushing hand cart.

Case report

Gist of the case

One Thangaraj, a male aged about 36 years, was pushing his wooden push hand cart on a tar road was hit by an unknown vehicle and ran away. Thangaraj died at the spot itself, and the pushing cart was found in damaged condition, as shown in Figure 1.



Figure 1: Damaged push hand cart

The wife of the deceased Thangaraj complained to the police station, and a case was registered by the Inspector of Police under section 304 (A) IPC (Hit and Run) after visiting the scene of the crime. Immediately, he requisitioned the service of the Forensic Crime Scene Investigator to visit the crime scene and assist the police investigation.

Crime scene examination and reconstruction

The Forensic Crime Scene Investigator, also the corresponding author, arrived at the scene and made a preliminary inquiry at the scene. The place of occurrence was 2 km away from the police station, opposite a cooperative bank. It was a tar road, and the dead body was found on the edge of the tar road. The push hand cart was found away from the dead body in a damaged condition. No skid mark was found on the road. The push hand cart was made of a cubic wooden box, opened at the top, with a length of about 4 feet, a breadth of 2 ½ feet, a depth of about ¾ feet, with four small wheels for running. The rear end of the cubic had raised iron bars with a handle to push the cart and carry the load without much strain. I have noticed a red colored streak mark on the iron handle of the cart, at a height of 3 ¼ feet from the ground level. On keen examination, red colored paint flakes were also found on the tar road. I have collected the red paint flakes in the scene and the paint streak

transferred on the cart and preserved for analysis in the Forensic Science Laboratory. It is an indication that a red colored vehicle was involved in the hit-and-run case, and the crime scene was photographed by the forensic photographer.

On the same day, the police made their investigation, and a red colored suspected tractor was seized and brought to me for examination. I have thoroughly examined the tractor, as shown in Figure 2, but no major damage was noticed on the tractor.



Figure 2: Tractor involved in this hit-and-run accident

Just in front of the tractor body, I have noticed a dent mark with a streak mark. The height of the dent mark was $3\frac{1}{4}$ feet from the ground level, corresponding to the height of the red streak mark on the push cart. Based on my findings, I opined that the tractor was the offending vehicle in this hit-and-run case and also sent my crime scene report to the Police Inspector. The paint flakes collected from the crime scene and the sample collected from the suspected tractor,

with a control sample, were sent to the Forensic Science Laboratory for analysis. The forensic science laboratory report confirmed the crime scene findings of the Crime Scene Investigator, the corresponding author. But the driver of the tractor denied the offence. The Police Inspector arrested the driver and released him on bail and prepared the charge sheet, and submitted it to the court. In the trial, the author was also present in the court.

Discussion

The pushcart is still used in small towns and village areas to transport items of baggage, water cans and other goods for a short distance. The police department is creating awareness about road safety and the role of vehicle drivers for a safe journey for vehicles and pedestrians. Thus, most of the road users know the traffic rules and safety measures, but it is a part of some road users having lethargic and careless behaviour that causes accidents and crashes (Kotosi, 2023). Being involved in a road accident can be a very traumatic time, particularly if you were injured. The offending driver of a vehicle may be involved in a collision with another vehicle, property or human being, who knowingly fails to stop the vehicle to hide the identity (Nataraja, 2019). The most important causes of road accidents and accidental deaths are due to high speed, not wearing helmets, the influence of alcohol & drugs, negligence of pedestrians, use of mobile phones or earphones while driving, and many hours of night driving without a break and many others (Nasar and Troyer, 2013)

Conclusion

The author was called in the Court, who presented his testimony before the Fast Track Court.. The forensic evidence that linked the offender and the offence was accepted by the Honourable Judge and appreciated the author in the open court for fixing the accused scientifically. Later in court, the driver also confessed his guilt, and finally, he was sentenced.

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References:

- ADSI-2021 | National Crime Records Bureau.. Retrieved April 3, 2023, from <https://ncrb.gov.in/en/node/3722>.
- Kotosi, P. “ The Influence of Road Users’ Behaviours on Pedestrian Safety in Urban Built Environment.” Scientific Research, vol. 10, no. 5, 2023, pp. 1-9.
- Mohsin, A.S.M. “A Study on Road Traffic Accident Scenario of Bangladesh.”. International Journal of Advance Research and Innovative Ideas in Education, vol.8, no.4, 2022, pp.731-745.
- Nasar, J., and Troyer, D. “ Pedestrian Injuries due to Mobile Phone Use in Public Places.” Accident Analysis & Prevention, vol.57, 2013, pp.91-95.
- Nataraja Moorthy, T. “Hit and Run Road Accident: Handwriting Characteristics Identified the Offending Vehicle.” Jacobs Journal of Forensic Science, vol. 4, no. 1, 2019, pp. 1–4..
- Nataraja Moorthy, T. “Identification of Primary Crime Scene from Secondary Scene through Soil Evidence in a Crime Concealment Case.” Journal of Krishna Institute of Medical Sciences University, vol. 9, no. 4, 2020, pp. 98–103..
- Nataraja Moorthy, T. “Mysterious Serial Fire in a Private Hospital – A rare Arduous Forensic Investigation Report.” Academic Journal of Forensic Science, vol. 7, no. 1, 2024, pp. 1–4.
- Nataraja Moorthy, T. “Cobweb Presence Solved the Mystery in a Simulated Burglary Crime Scene: Rare Animal Forensic Investigation Report.” Academic Journal of Bio Sciences, vol. 13, no. 4, 2025, pp. 472–474.
- Vikas Kumar, S, et al. “A Systematic Review on Road Traffic Accident: Causes and Control Measures.” International Journal of Creative Research Thoughts, vol.11, no.4, 2023, pp.291-301.
- Weyermann, C., and Roux, R. “ A Different Perspective on the Forensic Science Crisis.” Forensic Science International, vol.323, 2021, pp.1-7.