

Blunt Force Trauma in a Suspected Case of Drug Overdose Death: a Dilemma for Forensic Pathologists

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ABSTRACT

Deaths resulting from blunt force injury are some of the most common cases encountered by a practising forensic pathologist. At the same time, deaths due to drug abuse, especially synthetic opioids, are also a common phenomenon all over the world. In this paper, an interesting case is reported wherein a dead body brought as a case of drug overdose had tell-tale signs of blunt trauma on the body. The injuries were present on the non-accessible parts of the deceased's body pointing towards homicide. This case has been reported considering the interesting nature of the case as well as to emphasize the importance of meticulous postmortem examination so that the opinion may not be influenced by the history given by the investigating agencies.

Keywords: History, drug overdose, blunt force trauma, death

INTRODUCTION

Opioid abuse has been a global menace for centuries. The state of Manipur is a border state with neighbouring Myanmar, which is a part of the 'Golden Triangle', and considered a major transit point for drug trafficking and has many drug-dependent people, especially between the ages of 16 and 45.¹

It is known that synthetic opioids are refractive to reversal by antagonists and have often proven lethal.² On the other hand, one million people die annually worldwide due to homicides.³ However, homicidal blunt force trauma in a case of suspected accidental drug overdose death is a challenge to investigate and requires a thorough examination of all aspects of the case.

CASE REPORT

A 24-year-old male was brought to a peripheral hospital in Imphal, Manipur (India), late at night for treatment as a suspected case of drug overdose; however, he was declared brought dead by the doctor. The history given by the police was that he was a drug addict, and he attended a party along with his friends the previous evening. He had injected himself with some drug after which he fell asleep. At midnight, when his friends tried to wake him up, he was not responding, and white froth was seen coming out of his mouth and nostrils.

AUTOPSY FINDINGS

Rigor mortis was fully developed and post-mortem staining was present at the back and

fixed. The face was congested; lips, fingertips and toes were cyanosed. White froth was seen around the mouth and nose (Fig 1). An injection mark was seen over the right cubital fossa, red in colour (Fig 2). Multiple abraded contusions were seen over the back, across the midline, over an area (20cm x 16cm), with sizes ranging from (2cm x 1cm) to (9cm x 1.3cm), 108cm above the heel, red in colour (Fig 3). Multiple abraded contusions were seen over the anterior aspect of the right leg, over an area (18cm x 10cm), with

sizes ranging from (1cm x 0.8cm) to (4cm x 1cm), 25cm above the heel, red in colour (Fig 4). Scalp haematoma, (5cm x 6cm), was present over the right occipital region, 1cm from the midline; and (6cm x 3cm), over the left occipital region, 3cm from the midline; red in colour (Fig 5). Subdural haemorrhage with corresponding subarachnoid haemorrhage was seen over bilateral occipital lobes and the cerebellum (Fig 6). The stomach contained brownish-coloured fluid with semi-digested rice particles @ 100 ml with no peculiar

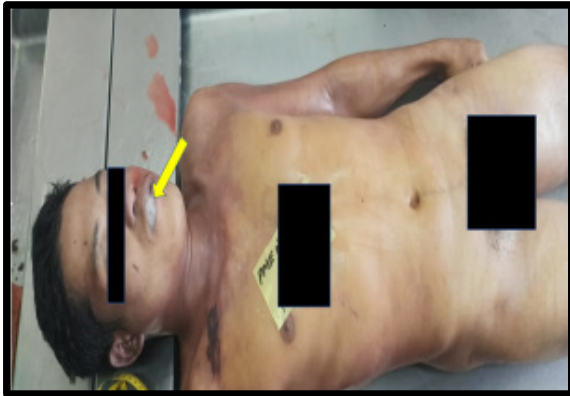


Fig. 1: White froth around the mouth and nose

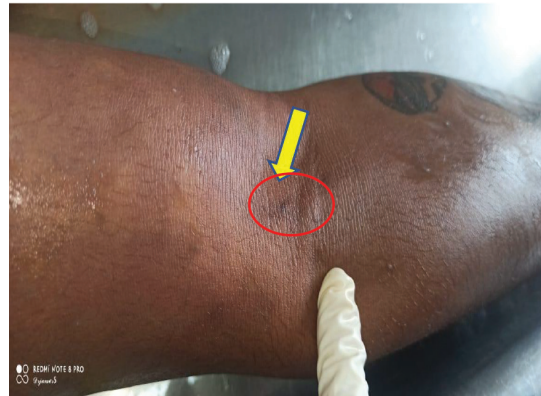


Fig. 2: Injection mark over the right cubital fossa



Fig. 3: Multiple abraded contusions over the back



Fig. 4: Multiple contusions over the anterior aspect of the right leg



Fig. 5: Scalp haematoma over the right occipital region



Fig. 6: Subdural haemorrhage with subarachnoid haemorrhage over bilateral occipital lobes and the cerebellum

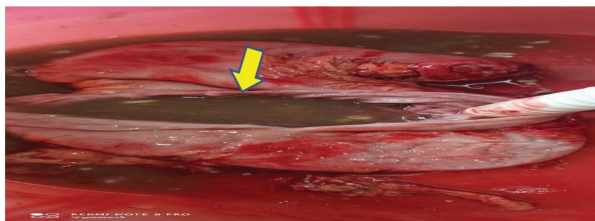


Fig. 7: The stomach contained brownish-coloured fluid with semi-digested rice particles

smell (Fig 7). Brain & lungs were congested and oedematous. All the other organs were also congested. Histopathology Examination showed features of interstitial oedema & congestion in the lungs, heart tissues showed congestion and the kidneys showed acute tubular necrosis. High-Performance Liquid Chromatography (HPLC) detected morphine in the blood. The final opinion as to the cause of death was given as "Asphyxia with intracranial haemorrhage resulting from blunt head trauma".

DISCUSSION

A death is labelled as suspicious if it is unexpected, and its circumstances or cause are unexplained in the early investigation.⁴ The body was brought by the police as a case of a suspected drug overdose. It is common for substance-abusing individuals to accidentally injure themselves because of inebriation or intoxication, which impairs judgment or motor control or coordination.⁵ At the same time, inflicting injury to the head is one of the most efficient methods of homicide as assailants often select a part of the body, where the maximum damage can be done with minimum effort.⁶ Further, an overdose of opioids can suppress the respiratory system, resulting in hypoxia which can result in variable levels of brain damage, ranging from transient cognitive impairment to death.⁷ However, the presence of multiple blunt trauma on the body with associated head injury baffled the autopsy surgeons regarding the cause and nature of death in the present case. It appeared that the drug overdose led to considerable harm to respiratory control in presence of blunt head trauma. Hence, asphyxia and homicidal blunt

head trauma could have contributed to the sudden death of the person. Interestingly, the autopsy findings in the present case helped in turning the investigation towards homicide.

CONCLUSION

The present case was a challenge for the autopsy surgeon since there were many factors which contributed to the cause of death. Both head injury and drug overdose can individually cause death in ordinary circumstances. In the present case, autopsy helped in establishing the cause and manner of death, and helped in the investigation of the crime in the right direction.

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Conflict of Interest:- Nil

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