CASE REPORT

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Dragging Deaths: A Case in Point

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ABSTRACT: A 16-year-old boy was riding his bicycle when he was struck by a truck. He was dragged over $2^{1/2}$ miles (4 km) before he was deposited on the side of the road. The injuries evident at autopsy revealed the boy died from dragging and not from the initial impact. The scene, and the autopsy findings, will be discussed.

KEYWORDS: pathology and biology, dragging, death, accidents

Case Report

The Accident

At approximately 12:45 a.m., a 16-year-old boy was riding his bicycle home after working in a fast food restaurant. While crossing the road, his bicycle was struck in the rear by a three-quarter-ton truck. A witness to the accident saw and heard the truck hit the bicycle, however, he neither saw nor heard anything from the victim. After the witness saw the truck drive away, he saw the bicycle and then called the police. Fifteen minutes later the boy's body was found on the side of the road 2.6 miles (4.2 km) from the scene of the accident.

The boy was found on his back. His shirt was pulled up high around the chest and his jeans were down around his ankles. He was not wearing either an undershirt or underpants. It was evident to the medical examiner who went to the scene that there were significant dragging injuries to the right side of the body (Fig. 1).

Approximately 2 h after the accident the truck was located in a nearby trailer park less than a mile from the body. The man driving the truck said that he remembered hitting the boy's bicycle, but did not remember hitting the boy. It was obvious to the police that the driver was intoxicated (a blood alcohol measured 8 h later revealed a blood alcohol content of 0.09 mg/dL). There was also evidence the driver had tried to wash out blood from some of the clothing he was wearing at the time of the accident.

There was a passenger in the truck at the time of the accident who later confessed that both he and the driver had seen the boy. They also realized, after at least a mile or more from the accident site, the boy was being dragged. They pulled off the side of the road after exiting

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FIG. 1—The body at the scene showing the deep injury to the right side and the trail of blood (arrow).

the highway, stopped the truck, and saw the body under the truck. The driver then backed up the truck and manually dislodged the boy's body.

The truck was found to have a dent in the middle of the hood. This dent was thought to be from the body impact because the bicycle was lower to the ground. Examination of the truck's underbody revealed no hair, blood or tissue. The only significant finding was a worn shineness to the inside of the right front tire caused by a recent rubbing action. None of the other tires were similarly worn.

Examination of the scene during daylight hours revealed a 5-in. (12.7-cm) wide continuous streak of blood track on the road surface beginning approximately 250 yards (230 m) from the scene of initial impact to the body (Fig. 1). The amount and distribution of the blood at the body location confirmed the passenger's statement that the truck stopped and then backed up to dislodge the body.

Autopsy

At autopsy, the body was found to be a normally developed white 16-year-old boy. He was 5 ft 8½ in. (174 cm) in length and weighed approximately 120 lbs (54 kg). There was a 24½-by 6-in. (62- by 15-cm) deep abraded injury to the right lateral flank which extended from mid chest to mid thigh. The 10th and 11th ribs were ground down and the liver was exposed and abraded. The skin and soft tissues of the thigh were worn away, exposing the femur. Over the upper back were multiple areas of confluent abrasions. One of these areas was stained black. There were multiple abrasions over the mid and lateral aspects of the back which extended to the buttocks. Over the remainder of the body trunk and extremities were superficial abrasions and contusions. There were also focal contusions and abrasions of the forehead and the face.

The internal examination revealed the extent of the liver abrasion and an 8½ in. (21.5 cm) in diameter defect of the overlying diaphragm. There was hemorrhage in the right perinepheric fat. Significantly, there were no fractures, subluxations, or disarticulations of

any of the bones and joints, and there were no internal injuries or natural diseases to the organs. There was focal edema of the brain and a solitary focus of subscalpular hemorrhage which corresponded to the described contusion on the forehead. Besides edema, there were no other abnormalities to the brain.

A sample of blood was submitted for a drug screen and no alcohol or other drugs were detected.

Discussion

The question of time of death became important when determining the degree of driver negligence. Other than the injuries as a result of dragging, there were no other signs of significant trauma. Difficult to dispute would be the possibility of a fatal concussion. The only support for this diagnosis were the statements made by the driver, passenger, and witness who all stated the victim made no sounds after the initial impact. At the very least, it is possible to state the victim was probably rendered unconscious.

The probability that seems most likely is the boy died either while being dragged or after he was left on the side of the road. Although there is no good method to estimate or measure the quantity of blood on the $2^{1/2}$ -mile (4-km) trail on the pavement, there must have been a considerable amount. There was also a significant volume of blood at the end of the trail where he was found. Could this amount of blood be deposited in such quantities without the heart still pumping? Unlikely.

The medical literature is replete with descriptions of injuries and causes of death in traffic and pedestrian accidents, however, there are no separate discussions of dragging deaths. Questions focusing on time of death are commonly asked and answered with ease by most forensic pathologists. In this particular case, the answers could not be given with any degree of medical certainty. Maybe these types of deaths will be more clearly understood when more are reported.

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