

Pathology/Biology — 2021

H66 A Fatality by Cattle Hooves in an Elderly Cowherder: Is There a Specific Pattern of Hoof Injury?

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Learning Overview: After attending this presentation, attendees will be able to identify the uniqueness of hoof injuries by hoof-bearing animals that proved fatal to a cowherder.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by creating awareness of specific forms of injury by cattle hooves that may be of medicolegal significance if such a case is found in deserted places with no witness to the incident. Presented here is a study highlighting such an incident that is rarely mentioned in the available literature.

Cattle are socioeconomically essential creatures that, due to their size and power, can cause injury and death. In spite of the large number of recognized animal/livestock injuries, little is known about factors and activities that raise or decline the danger of injury. Farm animals can bite, kick, gore, trample, fall on, step on, knock down, crush, pin between other animals or farm structures, peck, scratch, throw, buck, drag, ram, or butt. 1.2 Horses and cattle, rather than any single type of agricultural machinery, are reported to be the leading cause of injury. Cattle have about 360-degree panoramic vision. A swift movement at the rear of cattle may "spook" them. They have exceptionally sensitive hearing and can sense sounds that human ears are unable to hear. Loud noises scare animals, and research shows that high-frequency sounds in fact hurt their ears. These features explain why animals are often frisky and balky, mainly in unknown environments.

In the present case, a 70-year-old cowherder was herding his cattle in open land for grazing. He had been doing this for many years and was well versed with the route and animal behavior. Though he was old, he was in good health and had a loud voice that was sufficient for the cattle to obey his commands. He would always carry a bamboo stick and an axe for personal protection and also for herding the cattle. On the day of the incidence, as usual, he was herding a group of about ten cattle in open land near his farm. When he didn't returned home, family members searched for him. He was subsequently found lying unconscious near some boulders with his head showing injuries from which blood had splattered onto some surrounding boulders. The cattle were seen calmly standing beside him without any aggressive gestures. His stick and axe were lying beside him without any evidence of blood staining. He was taken to the tertiary health center where he was declared dead.

On autopsy examination, there were approximately four "C"-shaped lacerated wounds present over the frontoparietal region of the head; 8 to 10cm in length and extending to the bone. There was underlying subscalp hematoma with depressed comminuted fractures of the skull that were roughly oval in shape. On investigation, one of the cattle who was new to the herd had blood stains over its right front hoof. Also, there were no signs of any other foreign objects or any human interference at the site of the incidence. It was concluded that the suspected animal was responsible for the fatal injuries to the elderly man.

This presentation will discuss the importance of having knowledge regarding how these injuries can occur and lead to death.

Reference(s):

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- Watts M., Meisel E.M., Densie I.K. Cattle-related trauma, injuries and deaths. *Trauma*, 2014; 16:1: 3-8.
- Boyle D., Gerberich S.G., Gibson R.W., Maldonado G., Robinson A., Martin F., Renier C., Harlan Amandus. Injury from Dairy Cattle Activities. *Epidemiology*. 1997; 8: 1:37-41.

Fatality, Cattle, Hoof Injury