

bloody serum of the swelling which generally appears on one of the quarters or the side of the neck of an affected animal. This swelling is characteristic of black-leg when a crackling sound is noted on passing the hand over the swollen area. The crackling sound is caused by the presence of gas in the tissues, this being formed during the growth of the black-leg germs. On being cut, the affected muscle is found to be very dark in colour, while gas, having a peculiar penetrating acid odour is seen coming up from the cut surface in very small bubbles. As in the case of anthrax, the germs are killed and spore formation checked by leaving the hide on the dead animal, thus excluding the air.

Anthrax is much the more serious of the two diseases, as it may affect man as well as horses, cattle, sheep, swine, and other animals of any age or breed, and is quickly fatal. One may be led to suspect anthrax by the short duration of the illness. The animal may have been perfectly healthy the night previous, but is found dead in the morning, and is found to have a bloody discharge from the natural openings of the body (mouth, nostrils, anus, etc.) These features should arouse suspicion, and make one exceedingly careful in handling the carcass, so as to avoid infecting himself and others, or distributing the infection over the ground when removing the carcass to a suitable place for burial. If there is still doubt, a few drops of blood placed on a clean piece of note paper, allowed to dry in the air, folded and forwarded to a laboratory, enables a microscopic examination to be made, which should settle all doubts. A post-mortem examination may be performed, but this is not advised, as it is a very dangerous procedure. At a post-mortem on a case of anthrax, bloody stains are noted throughout the tissues and organs of the body. The spleen (milt) is greatly enlarged, very dark or black in colour; the blood is dark in colour, tarry and does not clot after death.

The carcass of such an animal should be destroyed by fire as soon as the diagnosis is made or suspected, care being taken that all discharges and litter about the animal be burned with it, even to the halter. The animal should, under no consideration, be skinned, as this is a most dangerous procedure; nor should it be dragged over the farm with a chain around its neck or leg that a spot may be found where the digging is easy, for by this means the infection is spread, contaminating any enclosure through which the animal may be drawn.

Black-leg is a disease of the ox, and is most often seen in animals from 6 months to 4 years old. The first symptom is usually lameness, and the entire duration of the disease may be slightly longer than anthrax. The quarter in which the animal has shown lameness becomes swollen and the tissue beneath the skin is filled with gas, feeling very much like stiff paper when pressed by the hand. Pressure gives a crackling sound similar to the rustling of paper. The skin covering the affected part is dry and, on post-mortem examination, is found to be very dark in colour, while the mucous membrane or internal lining of the intestines may be reddened or slightly blood stained.

The precautions to be taken in handling the carcass should be similar to those mentioned in the case of anthrax, as the danger of spreading the infection is serious, although human beings do not contract the disease. There should be no more difficulty experienced in determining the existence of black-leg than there is in diagnosing anthrax, but if it is desired to be absolutely certain, a few drops of the bloody material from the affected muscles placed on a clean piece of note paper and dried in the air will determine, when microscopically examined, whether the disease is black-leg.

Where the death is thought to be due to either anthrax or black-leg, and it is impossible to determine which affection caused death, the placing of a small amount of blood in an equal amount of glycerine will enable a positive laboratory diagnosis to be made. A drachm (teaspoonful) of this blood glycerine preparation is sufficient.

An opportunity for treatment of animals affected with either disease is seldom afforded, and when such an opportunity is presented it is usually fruitless, although recovery may occasionally take place.

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