

If the internal organs be examined immediately after death they will appear practically normal to the casual observer. There is a good deal of fat beneath the skin and in the abdominal cavity. The functions of the rumen (paunch) have just begun to be employed, as is evidenced by the fact of grass being present in it. The age is constantly from about four to eight weeks. The fourth stomach contains curdled milk, which, although only to be expected, seeing that the animal will have fed only recently, is frequently and erroneously deemed by the shepherd to be the cause of death. Almost with equal constancy may be found among the contents of the fourth stomach a loose ball of wool, or of wool and grass, to the presence of which death is almost generally attributed. As such a collection of wool is almost invariably found in any lamb's stomach, it having gradually accumulated through strands of wool being swallowed accidentally in the process of sucking the mother's teats, and as it never, in my experience, is in such a situation as to cause interruption to the passage of ingesta onwards from the stomach, and as there is never any evidence whatever of gastritis, its presence is totally without significance from a pathogenic point of view.

The kidneys are the only constant seat of disease, and in a casual post-mortem examination they are easily overlooked. They are bulky, dark-coloured, and are often so soft and extremely pulpy that they cannot be removed in a complete condition, and frequently have the capsule enclosing them ruptured in handling, and only a dark pulpy mass may be secured. The kidneys generally appear enlarged. On removing the capsule of the kidney the tissue beneath has almost the appearance of a blood-clot, due to congestion and the enormous hæmorrhage which has occurred in the substance of the organ. The liver is also generally congested. The heart is frequently distended, and the pericardium (the membrane enclosing the heart) usually contains clear gelatinous fluid, varying in quantity from 2 to 4 fluid ounces.

It is difficult to state exactly what is the exciting cause of this congestion of the kidneys and liver, but the predisposing causes are very evident. They are as follows: The age of the animal—that is, the time when the milk of the mother has begun to be supplemented by herbage—rich and plentiful supply of mother's milk, the absence of another lamb to diminish the excessive supply of mother's milk, and good pasture, favouring the production of this rich and plentiful supply of milk. In other words, all that tends to induce a plethoric condition in the lamb at the age of from four to eight weeks, before it has begun to take exercise far afield from the mother, predisposes to this disease. That this is so is proved by the fact that the best and surest preventive measure to adopt is the docking of the tail when the lamb is about three weeks old. After castration the disease rarely or never appears in ram lambs, whereas in ewe lambs, especially those docked when about a week or ten days old, it may appear later. This means simply that ample bleeding, by reducing the plethoric condition of the animal, removes the primary predisposing cause of this disease.

Obviously there is no treatment applicable as a curative measure. Prevention, however, is simple, consisting as it does of docking before the danger period of life occurs. In the case of ewe lambs which it is necessary to dock early, the tails should be left sufficiently long to permit of another joint being removed if found advisable later on, to reduce condition by bleeding, and so prevent further losses by the disease.