

ACCIDENTS IN SHEEP WORMING¹

by

D. F. Eveleth² and Alice I. Goldsby³

Individual treatment for the control of stomach and intestinal parasites of sheep has been shown to be necessary, but improper medication leads annually to the killing of many sheep because of ignorance, carelessness or both.

The practice of using phenothiazine in salt, mineral mixtures or in the concentrate feed will tend to decrease the rate at which a parasite load is built up but it will not eliminate the parasites. Sometimes heavy losses occur from too much dependence on medicated salt.

There are worm medicines composed of mixtures of anthelmintic substances which can be mixed with concentrate feeds and will remove most of the round worms and tapeworms. Such mixtures can be given only to sheep in feed lots. Sheep on pasture are not accustomed to being fed grain and frequently will not eat the medicated feed, especially when the grain is given only at infrequent intervals. If only a few eat all of the medicated feed there may be deaths from overmedication.

Treat Farm Flock Sheep Individually

For adequate control of sheep parasites in a flock of farm sheep it is necessary to medicate each sheep in the flock individually. A medicinal agent may be dispensed in two general forms; as a bolus, pill or capsule and as a liquid or drench. The same active ingredients are usually made available in both the "pill form" and the drench.

How To Use the Drench

The use of the drench has been found to be more effective in removing stomach worms than the same amount and kinds of medicine as a pill. Recommendations from this laboratory have been that the drench be given either with a soft rubber stomach tube or a "Whitlock" nozzle. When the stomach tube is used the medicine is measured and then poured into a funnel attached to the tube after it has been pushed gently down the oesophagus of the sheep. There is very little danger of injuring a sheep with the rubber stomach tube and it is quite difficult to get the tube into the trachea or wind pipe. Injury of the throat or medicine in the lungs is very uncommon when the stomach tube is used.

Using the Whitlock Nozzle

The "Whitlock" nozzle is a metal tube twelve inches long with a ball on the end. The nozzle is attached to a standard dosing syringe. When it is used it is nearly impossible to force the ball into the trachea. In this laboratory medicinal pneumonia has

¹Progress report in Bankhead-Jones Offset Project No. 58 "Gastro-intestinal parasites of sheep"

²Veterinarian

³Assistant in Veterinary Science

never been encountered in sheep treated with this type of nozzle. There have been some deaths which have been due to rupture of the oesophagus and the forcing of the medicine into the tissues of the throat. In all cases this has been found to follow severe struggling on the part of the sheep and the exercising of too much force by the operator of the syringe. When the Whitlock nozzle is used the sheep must be fully restrained before pushing the nozzle down the oesophagus.

Using the Short Ball-End Nozzle

Another favorite instrument for dosing sheep is a syringe with a nozzle six-eight inches long with a ball on the end. This type of nozzle is usually quite safe; however, a case recently came to our attention where the end of the "ball" had become so worn that a cutting edge was formed. Some of the sheep treated died about 24 hours after treatment. Post mortem examination showed that the sharp end of the nozzle had punctured the tissue in the throat and the edema (dropsy) caused so much swelling that the sheep actually died of suffocation.

Causes of Accidents

With both the short straight nozzle and the short ball-end nozzle there is some danger of forcing the medicine into the lungs. When the medicine goes into the lungs there may be death in a few minutes from quick absorption of poisonous material such as nicotine or arsenic, or the sheep may die after several days from pneumonia.

Using Boluses and Pills

When large boluses are used there is relatively little danger of harming the sheep except when too much force is exerted and the throat injured. With the smaller "pills" the greatest danger is that the pills will be pushed into the blind pouches beside the oesophagus and stay there. In these cases there is so much swelling that the sheep die from suffocation. This type of accident usually occurs when a balling gun is used.

When the pills are placed in the throat area with the fingers or a forceps type of instrument the sheep frequently force the pill out of the mouth and get no medication.

Using Gelatine Capsules

Carbon tetrachloride and some other liquids which do not mix with water are often given in gelatin capsules. It is not unusual for these capsules to be broken in the sheep's mouth. With these highly irritating substances going into the lungs there is usually severe coughing, with later development of pneumonia.

Another type of accident is caused by the use of too much medicine. When sheep are heavily parasitized the lining of the stomach and intestine is so irritated that the medicine is quickly absorbed. The sheep die of poisoning from a dose of medicine that ordinarily causes no harm. Therefore, if sheep are heavily parasitized the standard dose should be decreased to one-half and the treatment repeated in a week or so.