Preventing the spread of coenurosis – a disease of sheep and goats

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This brief provides information for extension workers and veterinarians who support smallholder farmers in Ethiopia. It provides information on coenurosis disease: its symptoms and consequences, how it spreads, and what farmers need to do to prevent it spreading.

What is Coenurosis?
Coenurosis is a fatal disease affecting sheep and goats. It is caused by the larval stage of the parasite called Taenia multiceps. The adult tapeworm grows in the intestines of dogs. In sheep and goats the larva develop cysts in the brain.

Five symptoms of coenurosis in sheep and goats
- Circling in one direction
- Tilting, lifting or lowering the head
- Signs of nervousness (bellowing, excitement, etc.)
- Weight loss
- Cysts can be observed on the brains of ruminants which have died

The coenurosis cycle
1. Dog eats a sheep or goat brain with a cyst containing larva.
2. Adult tapeworm(s) in dog’s gut produce parasite eggs.
3. Dog defecates parasite eggs on pasture.
4. Just like the faeces, the coenurosis eggs remain on the grazing area. The eggs can survive for several weeks on the grazing area, even if the faeces are no longer present.
5. Sheep and goats graze the land ingesting grass and the eggs, these hatch in the intestines.
6. The larva moves from the intestines to the brain, this can take several months.
7. The larva forms a cyst in the brain of the sheep and goats, which eventually leads to their death. There is no effective treatment to kill larva in sheep and goats: prevention in dogs is the only solution.

Break the cycle
Deworm dogs regularly with praziquantel
- Adult tapeworms are killed
- Parasite larva will never become adults
- No eggs will be produced

Do not feed sheep or goat heads to dogs
- Dogs will never get the parasite
- Larva will not develop into adult tapeworms
- No eggs will be produced
Important

• Sheep and goats infected before treatment of the dogs has begun will still be affected by coenurosis and die.
• It may take several months to see the full effect after the cycle has been broken.
• Expect to see a significant reduction of clinical cases of coenurosis in small ruminants within 6 months.
• Praziquantel treats other parasites in dogs, so your dogs will be healthier and stronger.

Recommendations

Avoid feeding sheep or goat heads to dogs before deworming

Deworm dogs every three months

• Place praziquantel into food (dosage 100–150 mg per dog)

Leave prepared foods for dogs to eat

• Make sure dogs swallow the tablets

Burn and bury sheep and goat heads

For more information, attend local village meetings and ask extension officers or veterinarians.

Whole villages should join forces to regularly deworm all dogs and to burn and bury all sheep and goat heads in the village.

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