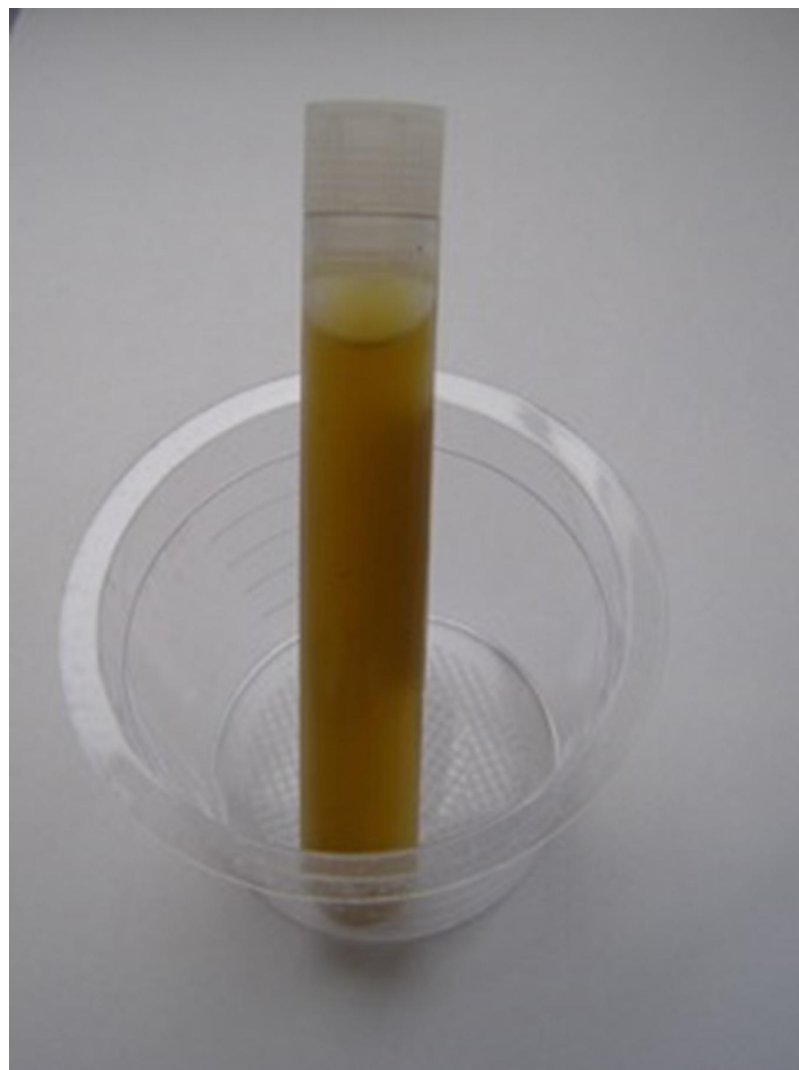


1. In a 300 head Merino flock in central Europe several ewes show signs of weakness, inappetence and mandibular oedema. It is the beginning of April and the ewes have been housed since late November, after having been taken in from improved permanent grassland, which has also been grazed by sheep in the previous years. The flock never had any access to open water sources or wet pastures. They were treated with levamisole at the beginning of the housing period in November. A drench test was carried out following treatment, and the high pre-treatment faecal egg count in a pooled sample (3200 epg) was reduced to zero (<30 epg) one week after treatment. Lambing took place in February with no obvious problems. During the housing period they were fed with hay, silage plus sheep concentrates in late pregnancy and lactation. They had ad libitum access to water and sheep minerals. Figure 9.1 shows one of the affected ewes.
 - a) What are your differential diagnoses for the clinical signs and how would you rule them out or confirm them in this case?
 - b) What is your suspected diagnosis?
 - c) How do you explain the occurrence of this problem under the given circumstances?



2. A dairy goat client has recently lost several animals to an acute illness, with death occurring within 24 to 48 hours after the first observation of clinical signs. The animals show signs of depression and initially soft faeces, quickly turning into watery diarrhoea (see faeces in picture). Following rapid deterioration, the animals become recumbent and die. A new batch of silage has recently been opened and the animals are on a high concentrate diet for peak lactation. The farmer practices a clostridial disease vaccination program with boosters given annually. The last booster was given 10 months ago. The goats have access to pasture and were treated with an anthelmintic drug during the dry period.

- a) What is your suspected diagnosis?
- b) How would you confirm this diagnosis?
- c) What factors could have led to this disease outbreak?
- d) What advice would you give the farmer regarding potential changes in management?



3. This is the carcass of a 4 week old female Texel lamb. The animal developed sudden onset hind limb paralysis at 3 weeks of age, 24 hours after turn out to pasture, but remained bright, alert and responsive. It was treated with a 5 day course of penicillin and streptomycin and a single injection of meloxicam, but was not responsive to treatment and was euthanased.

- a) Based on the clinical history, what are the main differential diagnoses?
- b) Describe the pathological lesion, the pathogenesis, and provide a final diagnosis.
- c) What potential concurrent disease could be present (provide the name and aetiological agent)?
How can you confirm this at post-mortem?

