Canolfan Milfeddygaeth Cymru
Wales Veterinary Science Centre
Issue: 41 (November 2022)

NEWSLETTER
CYLCHLYTHYR

New Graduate CPD on Liver Fluke

Liver Fluke CPD day to include a farm walk in the afternoon. With Rhys Jones and Becca Roberts from Aberystwyth University. Wednesday 9th November. 9.30-3.30pm. Sponsored by HCC.

PARASITIC GASTROENTERITIS

Parasites have caused significantly increased numbers of lamb deaths this year at WVSC. The hot dry summer has resulted in arrested parasite development with the result that lambs have not had sufficient exposure to build up any immunity. The rain that followed and warm soils have then produced a glut of rapidly developing larvae. In addition, poor grass cover means that lambs have been nutritionally challenged and they are more susceptible to parasite infestation.

Many of the labs in the APHA network have reported an increase in parasitic gastroenteritis (PGE) this autumn, evidenced by very high worm egg counts. Typically, the PGE has occurred in groups of lambs showing ill thrift and poor growth. However, they have not all presented with the usual lethargy and diarrhoea.

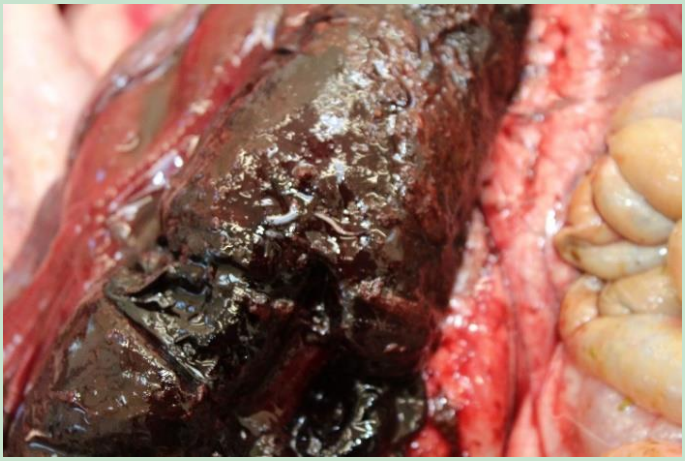

Figure 1 Trichostrongyle-type worms seen in a haemorrhagic gut

In many cases the lambs have been wormed multiple times and may not show signs of scour before being found dead. Clients should be reminded to carry out monthly faecal egg counts and ensure they are selecting and administering anthelmintics carefully.

ACORN POISONING

We have also seen cases of **acorn poisoning** in cattle, sheep, goats and an alpaca in recent weeks.

Increased numbers of acorn toxicity are being reported by post-mortem providers across the UK. This is a ‘mast’ year when an exceptionally high number of acorns are falling. Sheep may actively seek them out, but the problem is exacerbated by lack of grass and animals looking for other food sources. Separating livestock from oak trees producing large quantities of acorns would be prudent.

Acorn (tannin) toxicity leads to renal damage, resulting in azotaemia and so-called ‘uraemic syndrome’ which includes sloughing of the gastrointestinal mucosa. Acorns are not always present in the rumen but affected animals often have increased blood urea levels and infarcts can be seen in the kidneys on histology.

Acorn poisoning was diagnosed as the cause of death in a yearling ewe. This ewe was the second to die in a fortnight in a group of 62 in an area where there was access to acorns. Peritonitis was present in the abdomen and the rumen was full of acorns. Gastrointestinal contents were very dark indicating haemorrhage and shallow ulcers were present in the abomasum and along the length of the small intestine.

Figure 2 Acorns present in rumen of an ewe

The same diagnosis was made in a 31-month-old in-calf beef-cross heifer, which was found dead a week after housing. It had grazed under oak trees previously. In this case, extensive oedema and haemorrhages were seen throughout the carcase in addition to necrotising lesions along the entire length of the oesophagus. Extensive pleuropneumonia and pericarditis were also present. This was considered to likely be due to a secondary bacteraemia or directly due to mucosal damage.

Figure 3 Necrotising oesophagitis in an in-calf heifer due to acorn poisoning

Listeriosis was diagnosed in a 12-month-old heifer that was euthanased after being found 'in extremis': - recumbent with sunken eyes. Rumen contents were dry, impacted and contained mixed forages and leaves. A partial thickness abomasal ulcer was present with associated bleeding into the gastrointestinal tract. Whilst this ulcer may have contributed to clinical signs due to pain, it was unlikely to be the cause of the recumbency and may have resulted from a period of inappetence. Histology and gram staining was used to confirm the presence of *Listeria monocytogenes* meningoencephalitis. This may have been associated with feeding of silage.

Salmonellosis caused mortality and morbidity in adult cows on a dairy farm. Four cows developed scour, inappetence and milk drop a week post-calving. Signs progressed in two animals with increased heart rates, normal rectal temperatures, increased GIT sounds and right sided abdominal pings on auscultation. No mastitis was noted, and both were clean on vaginal examination. They were euthansed and submitted for post-mortem examination.

No torsion or impaction was present in either cow. Watery diarrhoea was present in one carcase with abomasal contents that were haemorrhagic and liquid. Gastro-intestinal contents of the other were unremarkable but toxic mastitis was present. Livers were swollen with rounded edges and haemorrhages were found throughout both carcases which suggested that septicaemia was present. *Salmonella typhimurium* was found on culture of caecal contents. An udder swab from the mastitic cow returned a heavy pure growth of *E coli.* Swabs from the livers cultured only mixed growth. Whilst this does not confirm septicaemia was due to either *E coli* or *Salmonella*, response to trimethoprim-sulphonamide has been good.

We have continued to see cases of **blackleg (clostridial myostitis)**. Remind clients that vaccination is an inexpensive way of avoiding this disease. Vaccines should ideally be given before the risk period – when animals go out to grass. Bruising and injuries that occur during handling leads to an increased risk of further cases. If vaccination is considered after cases occur, then administering concurrent antibiotics is recommended.

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Please check the eligibility for **free carcase collection** via this website:

http://apha.defra.gov.uk/postcode/pme.asp

The suitability of submissions for a postmortem exam. must always be discussed with the WVSC duty vet.