

Canolfan Milfeddygaeth Cymru NEWSLETTER **CYLCHLYTHYR**

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Changes in Personnel

Jon King has taken up a permanent role lecturing at the university and we thank him for his excellent contribution to WVSC. He will, however, maintain links the Science Centre. Bev Hopkins continues in her role and we have new recruits starting at the end of January and April, ably assisted by our locum VDIs, Kate Hovers and Ian Davies and newly appointed Ciona Smith



Figure 1. Pale and haemorrhagic kidney – acorn poisoning

Acorn poisoning was confirmed on three occasions. In each case whole and fragments of acorns and oak leaves were visible in rumen contents. In one incident in which four ewes out of 250 had died affected sheep presented with malaise and black diarrhoea prior to death. In another incident six lambs out of group of 105 had died since June. Kidneys were pale and soft with petechiae on the surface (Figure 1) in a lamb submitted for postmortem examination. As some losses had occurred in June, it was probable that the earlier deaths were due to other causes. Acorns contain tannins which cause gastroenteritis and kidney failure. Some sheep develop a liking for acorns and may gorge on them. Prevention of access by physical removal of acorns, by fencing off or covering with manure or slurry will reduce exposure. Alternatively sheep should be removed from affected grazing.

Mycoplasma dispar was identified on two occasions in association with other pathogens. In the first incident, eight bought in calves around six weeks of age had died out of a group of 30 and most of the group had shown clinical signs including shortness of breath. Others had a little scour and some calves had been found dead. A calf submitted for postmortem examination had an extensive sub-acute to chronic pneumonia affecting most of the lung tissue. Microbiology revealed Pasteurella multocida, M.

dispar and Mycoplasma bovirhinis. No significant viruses were detected. M. dispar and P. multocida were considered significant findings. M. dispar is regarded as a primary bacterial pathogen isolated more often from pneumonic lungs than from healthy calf lungs. M. bovirhinis is probably also significant although it is also a commensal microorganism that inhabits the bovine respiratory and reproductive organs.

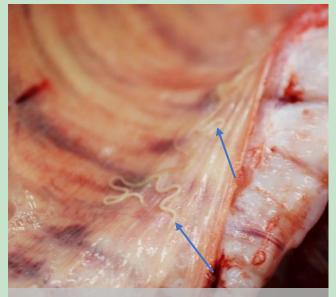


Figure 2. Lungworm (arrows) in the tracheal lumen

In the second incident, eight animals out of a group of 16 homebred cattle born June 2022 had died since housing on 30th October. The affected cattle had poor growth rates since late September, no other symptoms had been noted. A carcase submitted for postmortem examination was severely emaciated and a severe infestation of sucking lice was present on the skin and a small number of live lungworms were visible in the lumen of the trachea (Figure 2). A worm egg count suggested a heavy worm burden and Mycoplasma dispar was identified in a small area of lung consolidation. In this incident, M. dispar was not considered of primary significance. In view of all these findings, a visit to this farm to review the welfare and body condition of the remaining animals in the group as well as worming strategy was advised.

Bacterial meningitis in an adult cow. A welsh black cow, the only affected animal out of a herd of 81, was submitted for postmortem examination. The cow was lame on the right hind and developed nervous signs including nystagmus and subsequent recumbency which necessitated euthanasia. This was despite antibiotic and non-steroidal anti-inflammatory treatments. The right hind foot had an infected interdigital area tracking into the heel, consistent with early "foul in the foot". There was inflammation of the stifle joint in the same leg, possibly secondary to recumbency. Inflammation of the brain with cloudy meninges (Figure 3) was also observed and there were rumen fluke (likely to be incidental). Subsequent bacteriology was unremarkable, but histopathology of the brain confirmed a fibrinosuppurative meningitis with bacteria strongly suggestive of Fusobacterium. necrophorum and Streptococcus sp./Staphylococcus sp. Likely to be due to dissemination of infection from the foot to the brain by haematogenous spread. It was likely that this case was sporadic affecting an individual animal and therefore, if there were further cases it was advised to investigate further.



Figure 3. Meningitis with cloudy meninges.

Urolithiasis (Figure 4), hydronephrosis and a ruptured bladder leading to a uroabdomen was identified in a six-month old Easy care lamb. Three lambs died following a brief period of malaise, presenting with the ears down and lethargy, and death 24-48 hours later. Urolithiasis is most commonly found in intensively reared rams and male lambs, and associated with a diet which is high in grain or concentrate content, low in fibre and possibly reduced water intake. Salt licks to increase water intake, ready access to fresh clean water, and adequate good quality roughage may all help to reduce instances.



Figure 4. Yellow urolith (arrow) within the urethral process of the penis (vermiform appendage).

Johne's disease was confirmed in an adult ewe on a farm where ewes had been dying following chronic scour and weight loss since the summer. There was thickening of the ileal and caecal mucosa and a ZN smear revealed the presence of acid alcohol fast bacilli typical of Johne's disease. Cases of Johne's disease in sheep and goats show ill-thrift but diarrhoea is a less common sign than in cattle. Animals suffering from Johne's disease should be segregated, especially from young stock and culled as soon as possible. Their progeny, particularly recent offspring, should not be used for breeding. Although serological tests do not have high sensitivity, serology may be used to help identify infected sheep. Good hygiene, for example around feed, water troughs, lambing pens and housing will help to reduce spread of the organism. Vaccination is considered to be a good means of long-term control.

WVSC VDI: Bev. Hopkins and Locum VDIs: Ian Davies, Kate Hovers and Ciona Smith

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