



Thin Ewe Surveillance Scheme - APHA are funding the investigation of up to 3 thin ewes where there is ill thrift in the flock. These are **free of charge**, but numbers are limited, and it is only valid for a short time. Please contact the WVSC or your local APHA / Partner PM Provider lab to discuss any potential cases. Free carcase collection is also available for those eligible.

Marek's Disease (MD) was diagnosed in a 16-week-old hen from a small backyard flock that had been listless and quiet. A firm mass in the abdomen had been felt on clinical exam prior to submission.



Figure 1. Liver

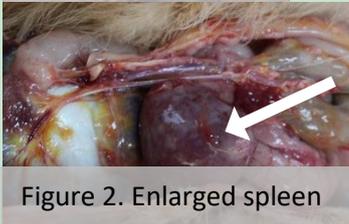


Figure 2. Enlarged spleen

At postmortem examination there were circular, raised, white lesions on the liver. The proventriculus was pale, thickened and had irregular necrotic ulcerations. There was a focally extensive 1cm in diameter tumour half-way along the small intestine. The spleen was enlarged, and it had a mottled appearance.

A multicentric lymphoma was confirmed on histological examination of the liver, spleen, intestine and proventriculus. MD is a lymphoproliferative and neuropathic disease of domestic chickens. In the acute form there is formation of lymphomas in visceral organs. The disease is highly contagious and can survive for long periods in the host and environment. Control and eradication of the disease is very difficult.

Bovine respiratory disease (BRD) was quite a common finding in late 2020 as might be expected with the seasonal weather change. Not surprisingly, with a disease that is multifactorial and has multiple aetiologies, several different pathogens were detected.

In one case, three calves were submitted after seven had died from a group of 85 bucket reared dairy calves. All calves were reported to be coughing and had been unresponsive to antibiotic and NSAID treatment prior to death. Post-mortem examination revealed the calves were in poor condition with cranioventral consolidation

of the lungs. Diffuse air-filled bullae were found in the lungs of the first calf typical of **Bovine Respiratory Syncytial Virus (BRSV)** which was confirmed by multiplex PCR testing of trachea.

Miliary abscesses in the cranial lung were also found in one calf, typical of **Mycoplasma bovis**. The diagnosis was confirmed by DGGE PCR of a sample of lung.



Figure 3. Cranioventral consolidation of lung

BRSV was also confirmed in a seven-month-old bullock which was one of two to die from a group of 25. The group were a mix of homebred and recently purchased cattle and several had been seen coughing. At PME there was cranioventral consolidation and extensive emphysema of the cranioventral lung. Caudally there was interlobular emphysema, overinflated lung and large bullae measuring up to 10cm in diameter.

Enterotoxigenic Escherichia coli (ETEC) expressing K88 fimbriae was cultured from the intestines of a 13-day old piglet with diarrhoea for more than a week. It was the third piglet in the litter to be affected and another litter was also affected in this closed 30-sow indoor pig unit. *Cystoisospora suis* can be a significant cause of diarrhoea from seven days old but there was a low level of oocysts in this case. There were also negative test results for Rotavirus and *Clostridium perfringens*.

ETEC K88 is a major cause of diarrhoea and death in neonatal and young pigs. Vaccination is possible but other factors known to predispose to diarrhoea in suckling pigs should also be considered such as hygiene, colostrum intake and iron deficiency.

[Click here for advice from the pignote.com](#)

Brachyspira hyodysenteriae (swine dysentery) was confirmed by culture and PCR from the intestinal content of three ten-week-old pigs. Five had died from the group in the last week with others affected with ill-thrift and diarrhoea.

Both pigs had an ulcerative colitis at postmortem examination. Swine dysentery results in diarrhoea and weight loss severely limiting productivity. Infection is spread via faeces, manure and fomites contaminated with manure from infected pigs. The causative bacteria are becoming resistant to commonly used antibiotics.

[Click here for APHA swine dysentery advice.](#)

Quality
CPD Upcoming CPD (online)
Basic sheep module 3 – Lambing Time 20th Jan.
Basic sheep/beef nutrition Wed 24th February
Trace Elements – afternoons of 23rd & 30th June
For more information go to:
<https://www.wvsc.wales/cpd/>

Chronic pulmonary abscessation secondary to septic thromboembolism arising from hepatic abscessation was confirmed in a 19-month-old bull. The liver was enlarged and contained multiple abscesses, and one was adjacent to the caudal vena cava. Hepatic abscessation in cattle of this age is most frequently associated with rumen acidosis as a reflection of excess intake of highly fermentable food substances. Bacteria and/or fungi disseminate from the rumen to the liver through the portal vein.

Enteric listeriosis was diagnosed in two ewes that had died from a group of 50 sheep where four looked unwell. The four had acute foul-smelling diarrhoea. The abomasal mucosa was red and both the caecum and colon were thickened with congested serosa (typhlocolitis).

Listeria monocytogenes was isolated from the gastrointestinal tract confirming enteric listeriosis. This syndrome is usually associated with ingestion of silage heavily infected with *Listeria*.



Figure 4. Typhlocolitis

2020 was defined, by some, as a **mast year** with large numbers of acorns being produced by oak trees. This was evident with two submissions in November and December being attributed to **Quercus / acorn poisoning**. The first case involved one ram-lamb that had died and another four had black watery diarrhoea and anorexia. The carcass had a strong uremic smell. A PME revealed black necrotic sloughing of the oesophagus with pale and enlarged kidneys with diffuse cortex petechiation.



In the second case, two ewes were submitted for PME after four had been found dead. A mild uraemic smell was evident from the carcass at necropsy and multiple acorns were found in the rumen of both ewes. Petechiation was seen in the kidneys. Diagnosis was confirmed by histology of the kidney, with acute tubular injury present which results in acute renal failure. Treatment of affected ewes can be attempted with activated charcoal, polyethylene glycol and fluid rehydration but preventing access of sheep to pastures with oak trees is recommended.

WVSC VIOs: Beverley Hopkins & Jon. King
Roger Daniel, Kate Hovers and Ian Davies

Wales Veterinary
Science Centre
Y Buarth, Aberystwyth,
Ceredigion, SY23 1ND



01970 612374



enquiries@wvsc.wales



<http://www.wvsc.wales>



walesvetscience



@WVSCAber

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

ahvla.defra.gov.uk/postcode/pme.asp

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