



Canolfan
Milfeddygaeth Cymru

Wales Veterinary
Science Centre

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NEWSLETTER CYLCHLYTHYR

Arwain Vet and Farmer Conference

Wed 7th June at Medrus Conference Centre, Abersytwyth University. FREE

Morning on Sustainability in farm animal practice and then an afternoon of AMR with Arwain DGC

Go to www.wvsc.wales/cpd/arwain-vet-and-farmer-conference/ to register

Here is a roundup of our interesting cases from the end of 2022 and the beginning of 2023.

Diaphragmatic lesion and fatal haemorrhage in a

Texel ewe A yearling Texel ewe in a group of 150 was observed looking dull. The next day, she was found dead in a field shortly after the sheep were handled. All animals were in good condition without any signs of ill thrift or scour. They were on grass with no supplementary feed. The ewe was in good condition and had a very good fat cover. A full gall bladder indicated she had not eaten for 24 hours before death. A severe laryngeal chondritis was present with a secondary polyp obstructing the lumen of the larynx and green purulent material was present in the soft tissues surrounding the larynx.

Fig 1: Laryngeal chondritis in a texel ewe



The mediastinum and over 50% of the thorax contained clotted blood. The dorsal surface of this blood clot had begun to organise whilst ventrally the blood appeared fresh. 100% of the left cranial lung lobe and 50% of the left caudal lobe were consolidated. A 3cm abscess was present on the medial side of the left caudal lobe entering the mediastinum. The right lung lobes appeared unaffected. The diaphragm near the aorta was noticeably thickened and the muscle appeared to be infiltrated by clotted blood. The exact site of haemorrhage was not determined.

It seems likely that some bleeding had occurred prior to death but the stress of handling in an animal that already had a constricted airway triggered haemorrhage that was fatal or caused severe dyspnoea due to occupying space in the thorax.

These lesions have frequently been reported in Texel sheep and Beltex (Waine K et al. Vet Rec Case Rep 2019;7). A common feature is hypertrophy of the diaphragm with

infiltration of blood. It has been speculated that a collagen disorder may play a role but currently there is no evidence for this. The mechanical effects and physiological changes that follow chronic airway obstruction in Texel breeds are thought to be a more likely cause in these cases.

Haemonchosis in a Dorset ewe One adult ewe was submitted for PME in May after two had died from a group of 45 housed since December. The ewe had pale mucous membranes. Necropsy found severe subcutaneous oedema in the subcutaneous tissues of the ventral jaw and ventral abdomen. There was copious amounts of serous fluid in the abdominal cavity. The abomasum contained large numbers of *Haemonchus contortus* nematodes. The parasite is a



Figure 2. *Haemonchus contortus* nematodes

bloodsucking parasite of the abomasum in sheep and goats. Clinical signs of anaemia, ill thrift, bottle jaw, exercise intolerance and death are commonly seen in cases of haemonchosis. If disease in lambs is seen, then clinical cases in adults are common the following Spring. Diagnosis at PME is through identification of parasites, faecal testing is carried out at APHA Carmarthen for diagnosis in live animals.

Upcoming CPD courses:

19/20th September - Ruminant Nutrition with
Kate Phillips in Builth Wells

4th October - Advanced Sheep Parasitology
with Sian Mitchell, Stew Burgess and Philip
Skuce. <http://www.wvsc.wales/cpd/>

Atrial and Ventricular septal defects in a ten-week-old calf One ten-week-old calf was doing well up until weaning, but then respiratory signs were noted and despite treatment it died.

The calf had extensive subcutaneous gelatinous oedema on the ventral neck and sternum. The liver was enlarged with a typical 'nutmeg' appearance. The lungs were overinflated caudally, while the cranial lung was collapsed. The heart was grossly enlarged. A 1cm diameter atrial septal defect was noted along with a similar sized ventricular septal defect.

Figure 3. Enlarged nutmeg liver in a calf with ASD



The gross pathology is attributed to congestive heart failure due to two congenital heart defects. There was a recent article in the Vet Record by Mick Millar et al on congenital heart defects in calves.

CPD Club Dates 14th June with Russ Morpew on recent fluke diagnostic research and 28th June with Rhys Jones on Liver fluke environments

Mesenteric torsion in a lamb

A Texel-cross lamb collapsed when handled for routine worming and died shortly afterwards. It had appeared healthy apart from some mild scour. Ten to fifteen lambs had died in the previous two weeks in this 1700-ewe flock. They were outside and receiving supplementary feed.

A mesenteric torsion was found on gross post-mortem examination. The caecum and small intestine were dark purple with a sharp demarcation of colour around the twist. This lamb also had a high count of *Trichostrongyle*-type eggs in the faeces (1950 epg).

Cases of so-called **redgut** in sheep can occur as 'outbreaks', associated particularly with grazing legumes such as clover. However, anything that affects gut motility can predispose to the condition, such as a sudden change in diet or feeding of other readily fermentable crops. Rapid rumen passage and increased fermentation leads to caecal dilation. A sudden twist in the intestinal mass can then suddenly occur. Parasitic gastroenteritis may have increased susceptibility in this case and may account for the other deaths in the group as well.

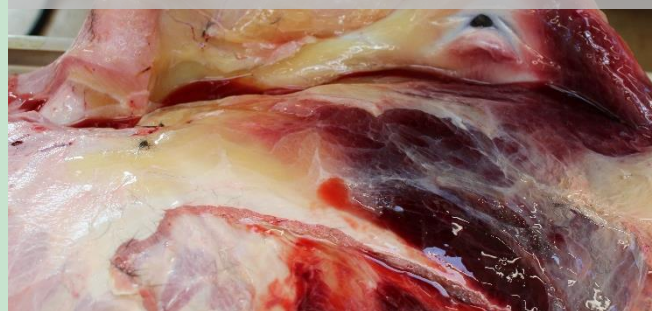
Stillbirth due to congenital hepatic fibrosis was diagnosed by histology after submission of a stillborn calf that was born alive but died within a few hours. Severe subcutaneous oedema, ascites and an enlarged liver were noted on post-mortem examination.

Figure 4. Enlarged liver from calf with congenital hepatic fibrosis



Histology changes in the liver reflected ongoing liver injury and attempted repair. The changes reflect a dysplastic process of the ductal plate and/or hepatic angiogenesis. Congenital hepatic fibrosis cases are seen sporadically in aborted or neonatal calves. This is an autosomal recessive heritable condition in humans, but the heritability of cases in cattle has not been established. No further cases have been reported from the same farm.

Figure 5. Severe subcutaneous oedema in stillborn calf



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Please check the eligibility for **free carcass 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.