Canolfan Milfeddygaeth Cymru
Wales Veterinary Science Centre

Issue:44 (Aug 2023)

NEWSLETTER CYLCHLYTHYR

WE ARE RECRUITING – Vets & Techs

1. Veterinary Disease Investigator MRCVS

2. Laboratory Technician

Are you a veterinary surgeon looking for a new challenge or with an interest in pathology? Do you fancy a job with the scope to develop areas of interest in disease diagnosis and/or surveillance?

There is flexibility in these posts with part-time, flexitime and seasonal working all possible scenarios for the right candidate. All working patterns and levels of experience considered. If you are interested, then please check out our website for more details or get in touch via email (enquiries@wvsc.wales) or phone (01970612374) to have a confidential chat (01970) 612374.

https://www.wvsc.wales/recruitment/

Colisepticaemia, failure of passive transfer and joint ill were confirmed in a five-day-old suckler calf submitted for PME. This suckler herd of 50 cows calved outside, however, the last four cows were housed to calve to facilitate management. Two of the last four calves born died within five days of birth. The calf was quiet after birth so was given two litres of colostrum within the first few hours of birth. It also needed frequent help suckling subsequently. The calf collapsed and despite treatment, died at five-days-old.

Figure 1. Fibrin in the carpal joint

At necropsy, the eyes were sunken, and the mucous membranes were tacky, consistent with dehydration.

There was fibrin, purulent material, and brown liquid in multiple joints. There was also diffuse cloudiness of the meninges with fibrin and pus.

The rumen contained pink liquid (consistent with electrolytes) and the abomasum was empty; the small intestinal content was a dark red liquid, and the faeces were dry and firm.

A ZST was performed with a result of 2.8 ZST, confirming absolute failure of colostrum absorption. *E. coli* was isolated from two joints, and a brain swab, confirming colisepticaemia. The *E. coli* was resistant to both tetracycline and ampicillin.

Lead toxicity was confirmed as the cause of sudden death of a heifer that was found dead from a group of 22 finishers. The group had been moved to the pasture not used for grazing previously two weeks prior to the incident. Necropsy was unremarkable; therefore, a sample of frozen kidney was sent for biochemistry testing. Lead analysis of the kidney confirmed toxicity with 81.40mg/kg FT (reference range 0.00-0.20). Values in excess of >2.07mg/kg FT are consistent with a diagnosis of lead poisoning in cattle. The case was reported to APHA to take forward as a potential food safety investigation. Farmers have a duty of care under the Food Safety Act 1990 to show due diligence to protect the food chain. The animals were removed from the field immediately and blood testing of the remaining animals will be required prior to slaughter.

An eight-week-old lamb carcase was submitted to investigate lambs with hind-limb paresis and/or paralysis in different groups on this large flock. Grossly, a **spinal abscess** was found, with narrowing of the spinal cord in the mid-thoracic vertebrae. The lamb also had a wound on the tail stump.

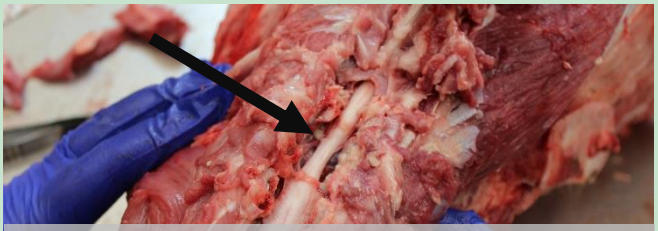

Figure 2. Spinal abscess in a lamb with hind limb paresis

Spinal abscesses in lambs can occur as a form of joint-ill and can arise from haematogenous spread of bacteria, or from ascending infection after tail-docking. In this case the source of the infection was unclear.

Oestrus ovis larvae were found during postmortem examination of an adult ewe found in lateral recumbency, paddling with opisthotonos. Several *oestrus ovis* larvae were seen within the nasal turbinates.

Oestrus ovis are the larvae of the nasal bot fly. They are the likely cause of the neurological signs seen. The adult fly lay larvae on the nose which then migrate into the nasal cavity. Adult larvae would be sneezed out onto pasture to pupate and develop into adult flies. The hot temperatures in May and early June would have allowed early emergence of the larvae.

Salmonella typhimurium was isolated from an adult ewe submitted where 20 ewes from a group of 150 had been affected by sudden onset depression, condition loss and abdominal pain. Seven ewes had died. At gross PME significant findings were limited to the gastrointestinal tract. The abomasum contained brown water and there were multiple erosions on the surface. Intestinal content was liquid throughout.

The client was advised to isolate sick ewes and minimise contact with the ewes, along with following strict hygiene due to the zoonotic potential.

Figure 3. Full thickness abomasal ulcer.

An **abomasal ulcer** was confirmed as the cause of death of a three-week-old calf submitted after acute colic and dying overnight. The calf was one of two similarly affected calves from a group of 240 three-week-old calves being contract reared.

The ulcer was full thickness and was discharging abomasal content into the abdomen causing a severe peritonitis. Milk fed calves on milk replacer are commonly affected with abomasal ulceration although not usually this severe. Treatment is by addition of antacids into their feed to increase the pH of the abomasum and to increase closure of the oesophageal groove.

CPD

OPA Scanning in Sheep with Dr Phil Scott
12th September – full day course £400 + VAT

Sheep nutrition with Kate Phillips
Only a few spaces remain.
19th September – Basic nutrition
20th September – Advanced nutrition.
£500 for 2 days, £275 for 1 day.

For more details please go to www.wvsc.wales/cpd or email enquiries@Wvsc.wales to book.

GWAREDU SCAB

WVSC is ready to receive your Gwaredu Scab skin scrapes and blood samples for ELISA testing. One of only a few labs in the UK to offer the Moredun Research Institute Sheep Scab ELISA commercially.

https://www.wvsc.wales/laboratory-services/

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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.