



Canolfan
Milfeddygaeth Cymru

Wales Veterinary
Science Centre

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NEWSLETTER CYLCHLYTHYR

We are organising not one but TWO Veterinary Conferences this Summer. Vets Cymru early bird tickets are available to purchase now, click on the image below to visit the website. But first is the FREE of charge Arwain DGC Vet and Farmer Conference on 5th June. Click here to register or find out more.



Upcoming Disease Alert

Based on submissions in previous years - In the next six weeks we expect to see cases of Hypomagnesaemia, Clostridial disease, Pasteurellosis.

Salmonella in sheep

Salmonella typhimurium was responsible for heavy losses in a flock of in-lamb ewes. Affected ewes were scouring, inappetent and recumbent, some aborted. Four ewes were submitted for PME. All four had petechiae and ecchymoses throughout the abomasal, small intestinal and caecal mucosae with dark red liquid content.

Salmonella typhimurium can cause severe enteritis in sheep. It's found in the digestive tracts of healthy individuals or introduced by environmental contamination, birds or rodents, contaminated feed or water.

Salmonella montevideo was responsible for abortions on two separate holdings. The placentae were thickened with white milium lesions. The lambs were oedematous, and the carcasses were gassy. *S. montevideo* is a known abortifacient agent and wild birds are often implicated in spread.

Salmonella diarizonae was diagnosed as the cause of death in three ewes. Postmortem findings included foul smelling diarrhoea and bronze-coloured livers with rounded edges. *Salmonella enterica* subspecies *diarizonae* is the most common *Salmonella* isolated from sheep. Abortions are the most common presenting sign. In cases of diarrhoea, it is usually an incidental finding or found in combination with concurrent disease. A negative energy balance was proved in this flock, although testing for iceberg diseases was suggested.

Stressors such as transportation, changes or absence of feed or water, high worm burdens, etc. can induce carriers to start shedding. High stocking density, such as when housed, facilitates spread. Infection is usually via the faecal-oral route. Control of an outbreak involves: isolating affected individuals, improving hygiene in highly stocked areas, avoid mixing groups, protect feed and water from faecal contamination, disinfecting buildings where possible, reduce stressors and practice good biosecurity.

All *Salmonella spp* should be considered zoonotic.

Jejunal haemorrhage syndrome (JHS) is suspected in an adult dairy cow that was the third sudden death on a dairy farm. Reduced rumination was detected six days before death. Milk drop, discomfort and paleness was noted shortly before death.

Large blood clots occluded the jejunum and ileum (Fig 1), there was darker blood in the large intestine. The abomasum and proximal duodenum were unaffected. The rest of the carcass was pale and there were petechial haemorrhages throughout.

JHS is a poorly understood phenomenon that presents sporadically. *Clostridium perfringens* type A and *Aspergillus fumigatus* are both hypothesised to be involved. Gastrointestinal dysbiosis is almost certainly involved. Most cases are reported over winter in housed adult dairy cows within the first 100 days of lactation.

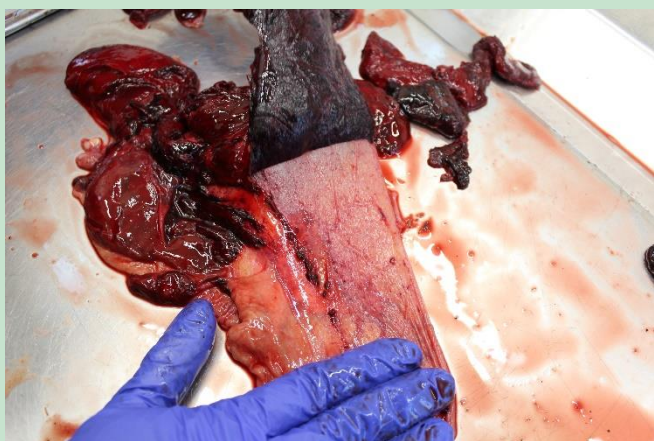


Figure 1 Catastrophic haemorrhage in the jejunum in an adult dairy cow with Jejunal Haemorrhage Syndrome

Clinical signs are non-specific and related to blood loss and hypovolaemic shock and can include a right-sided ping.

The histology in our case revealed a severe haemorrhagic enteropathy, typical of JHS. Unusually in our case, there was also a distinct eosinophilic enteritis which is rarely seen in dairy cows and we aren't aware of this being reported in other cases of JHS.

This was an extremely interesting case with spectacular gross pathology, we would like to thank our colleagues in the APHA and the Cattle Expert Group for their support and expertise.

We have welcomed new Vets to our team this Spring. Jane Morgan started in January, and Claire Jones starts this month. You will be hearing more from them both over the coming months. My thanks go to our Locums Ian Davies, Kate Hovers and Ciona Smith who have proved invaluable to continue our service since the New Year.

A four-week-old lamb with pasteurellosis was submitted with significant scavenging of the abdominal cavity. Luckily there was significant pathology still to be seen in the thorax. There was a history of sudden deaths in this age group of lambs at grass. The ewes were vaccinated with Heptavac-P® pre lambing. There was significant consolidation of the cranio-ventral lung lobes (Fig.2). Bacteriology of the lungs diagnosed a tetracycline resistant *Mannhaemia haemolytica* in this case, part of the pasteurellosis complex. Testing is ongoing to confirm if *Mycoplasma* is involved.

We are seeing increasing numbers of tetracycline resistant bacteria in sheep, highlighting the importance of culture and sensitivity testing.



Figure 2 Cranioventral consolidation in the lungs of an adult ewe

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

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



01970 612374



enquiries@wvsc.wales



<http://www.wvsc.wales>



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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.