VETERINARY ADVICE

Finding ways of dealing with summer pneumonia

an interesting case regarding summer pneumonia in suckled calves recently.

The herd in question was a small, seasonally calving pedigree beef herd producing bulls and heifer replacements typically for society sales.

The breeding stock on this farm is vaccinated for BVD and IBR and the herd is monitored free for BVD virus. The cows and heifers calve down in March and April in the farm buildings and then all stock are walked over three miles onto high exposed ground for summer.

Prior to 2014, young stock were vaccinated with a "3 in 1" vaccine (PI3, RSV and Pasteurella) before housing.

What happened in 2014 and last year?

The herd suffered numerous cases of pneumonia in its young stock during the summer of 2014. In response, a

SUMMER PNEUMONIA

Jonathan Stockton, Kingsway Veterinary Group, uses a case study to offer advice about summer pneumonia in suckled

combined intranasal vaccine (RSV and PI3) was used in the 2015-born calves. The vaccine was given from seven days in order to offer protection during the summer months.

Despite this, early vaccination sporadic cases of pneumonia were seen during summer 2015. Two of these cases were investigated using bronchoaveolar lavage (BAL). This is where fluid is collected from the lungs of a live animal and analysed for respiratory pathogens.

Unfortunately, there was no evidence of viruses, mycoplasmas or bacteria in the samples collected. No animals died and therefore no post-mortem

samples were available.

In May 2016, the calves were vaccinated from two weeks of age using a "3 in 1" vaccine (PI3, RSV and Pasteurella) in order to provide improved Pasteurella cover for the summer of 2016.

What happened this year?

Despite the use of the "3 in 1" vaccine, in spring 2016 there were four cases of pneumonia out of 24 calves. Three out of the four cases were treated successfully using long-acting antibiotics and non-steroidal anti-inflammatories.

The fourth case did not respond. The calf was about eight weeks of age and well



ADVICE: Jonathan Stockton, of Kingsway Veterinary

grown. A week following the initial examination, it was found to be depressed and quiet with a significantly elevated temperature. There was no appreciable weight loss.

Blood samples revealed a severely low red blood cell count, along with a very high white blood cell count. A very poor prognosis was given.

Post-mortem examination revealed very severe pneumonia and fibrinous pleurisy in the right hand side of the chest.

The left hand side of the chest was completely clear of any pathology.

Why was this happening?

Despite taking samples direct from the lungs of pneumonic animals, no significant pathogens were identified. The post-mortem showed that the animal did not die of typical pneumonia but, instead, was likely due to aspiration of material into the lung with the resultant severe and unrespon-

unilateral pneumonia. This implied that the death was not a failure of the vaccination programme. In fact, half the number of cases were seen this summer, so perhaps vaccination had helped.

The calves had been vaccinated against the most common causes of pneumonia and the herd was, and still is, free of BVD. Despite this, we have continued to see cases of pneumonia which is hugely frustrating. This might suggest that less common bugs may be involved eg mycoplasma or H Somni.

These bugs are more difficult to isolate dowing to their delicate nature and mode of action. Post-mortem investigation and analysis of lung tissue would be the ideal method for detecting the pathogens involved but, unfortunately, no typical cases were available to post-mortem.

For the future, we will continue to investigate cases but we are considering transporting the calves rather than walking them and modifying the vaccination regime for next spring in an attempt to continue to reduce the incidence of this unusual summer pneumonia. This may include considering new vaccines that cover the more unusual bugs.

