

## When BVD is on farm 'every problem under the sun' has a bigger impact

### Treenie Bowser

Veterinary Surgeon, Parklands Veterinary Group, Northern Ireland

**"This case shows the importance of BVD as an underlying disease which must be eradicated from a farm to ensure that all other disease control protocols also have a successful outcome."**

### Background

An investigation was started on a beef suckler (mama beef) farm which suffered from numerous problems which included weak calves who were slow to stand and start suckling; scour and pneumonia in young animals, dietary upset in cows, poor cow condition and general queries over fertility.

The farmer was knowledgeable and nutrition was good there seemed to be an underlying immunosuppression issue causing on farm productivity and profitability to be poor. It was suspected that BVD might be the underlying cause of this immunosuppression.

### Preliminary Indication

Pneumonia and scour in young stock and body condition in adult animals were initially the main concerns. Investigations showed evidence of pneumonia viruses and that there was poor uptake of colostrum proteins mainly due to weak calves being slow to stand and suck. Vaccination for pneumonia was started and hygiene of calving pens was made a priority and Halocur for 7 days from birth was implemented on farm to improve calf health.

In the adult cattle heavy infestations of Paramphistomes or Rumen fluke were identified combined with trace element deficiencies. These were both treated.

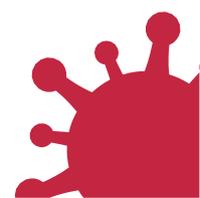
### Further Development

Health on farm improved significantly until in January 2016 the farmer reported he had just scanned a batch of heifers and was deeply distressed to find only 4 out of 14 were in calf. With this news it was decided to re-sample the calves that had previously been tested for BVD antibodies to see whether BVD could be resulting in the infertility in the heifers. Results showed that previously antibody negative animals were now antibody positive from this it was highly likely that a PI animal was present on farm.

All animals were blood sampled, out of 200 blood samples, one animal was found to be BVD antigen positive. This animal was culled.

### Treatment Applied

- Pneumonia vaccination in calves
- Halocur for 7 days from birth
- Oxyclozanide based product in adult cattle
- Ruminal mineral supplement boluses in adult cattle
- BVD vaccination



## Result

Two months post removal of the BVD PI animal the farmer was amazed at how well his animals were thriving. New born calves were having only minor problems with scour and pneumonia which were easily cured, his heifers were in calf having been vaccinated and his beef bulls had “never grown like it”. Overnight the farm went from having “nearly every problem under the sun” to being a successful enterprise with a very happy farmer at the helm.

It is clear to see that BVD on this unit was underlying and transient infections between animals were resulting in significant losses from secondary diseases. Although identification of these secondary diseases was necessary and control measures implemented, only once the underlying BVD issue was resolved did the health on farm really start to improve.

## Questions

Q1. What gastrointestinal parasite was identified in the adult cattle in this case?

1. Fasciola Hepatica (Liver Fluke).
- 2. Paramphistomes (Rumen Fluke).**
3. Dictyocaulus viviparous (lung worm).

Q2. Some of the heifers had been previously tested negative for BVD antibodies but were retested after poor scanning results and found to be positive for BVD antibodies. What could this mean?

1. They have become persistently infected with BVD.
2. The first test was incorrect/false negative.
- 3. They have been exposed to BVD possibly due to a PI been on farm.**