



INFECTIOUS BOVINE RHINOTRACHEITIS (IBR)

INTRODUCTION

Infectious bovine rhinotracheitis (IBR) is caused by bovine herpesvirus 1 (BHV-1) and is widespread in the cattle population. Once infected, a cow remains a carrier for life, spreading disease to other cattle in times of stress.

CLINICAL SIGNS

The incubation period (time from infection to showing signs of disease) is 2-6 days. Clinical signs range from mild to severe, depending on the presence of secondary bacterial pneumonia.

Clinical signs include: high fever, anorexia, coughing, excessive salivation, nasal discharge that progresses from clear and runny to thick and pussy, conjunctivitis with a watery discharge, inflamed nostrils, and difficulty breathing if the larynx becomes blocked. In mild cases, milk drop may be the only symptom. In the absence of bacterial pneumonia, recovery generally occurs 4-5 days after the onset of signs.

Abortions may occur concurrently with respiratory disease but may be seen up to 100 days after infection. They can occur regardless of the severity of disease in the cow. Abortions generally occur during the second half of pregnancy, but early embryonic death is possible.

DIAGNOSIS

Eye or nasal swabs can be taken in the early stages of the disease to isolate the virus. Blood tests can be used to confirm a diagnosis by sampling twice, three weeks apart. It is not possible to detect an active IBR infection by blood tests from aborting cows, because IBR infection generally occurs a considerable length of time before the abortion.



TREATMENT AND PREVENTION

Antibiotics and anti-inflammatory drugs are indicated to prevent or treat secondary bacterial pneumonia. Two types of vaccine are available.

1. Live vaccine - can be given intra-nasally or by intramuscular injection. One dose generally gives 6 months protection and is useful in young naïve stock to give them protection from infection. Live vaccine may be given up the nose, in the face of an outbreak.
2. Dead vaccine – one shot per year in the autumn. It must be given in the 6 months after a live vaccine. This vaccine has been shown to reduce shedding by cattle that are already infected, so is most useful in a herd of adults in which infection is already present.

Both are marker vaccines i.e. it is possible to differentiate between antibodies against the disease and the vaccine in blood tests. However, it is recommended that young breeding bulls are not vaccinated against IBR, because they may be discriminated against when sold for breeding if they have antibody titres.

Eradication of the virus is possible by regular blood testing and culling reactors.

KEY POINTS

IBR is a virus

Once a cow is infected, a cow remains a carrier of IBR for life

Mild IBR results in a milk drop

Abortions can occur up to 100 days after infection

Severe IBR symptoms include: fever, cough, nasal and eye discharge, difficulty breathing

Diagnosis is by testing bulk milk, blood or nasal/eye swabs.

Treat cows with antibiotics and anti-inflammatories

VACCINATION SUMMARY

- Live vaccine if young or naïve stock
- Inactivated vaccine is useful if trying to reduce IBR shedding by carriers in an infected herd
- Cattle need boosters every 6 or 12 months
- Don't vaccinate pedigree bulls that may be sold for breeding

For further information, please contact us at the addresses below:

Lancaster Practice

Bank Top, Lancaster Auction Mart
Wyresdale Road, Lancaster LA1 3JQ
Tel: 01524 60006

Kendal Practice

Unit 2b, J36 Rural Auction Centre
Crooklands, Milnthorpe, Cumbria LA7 7FP
Tel: 01539 567899

Bovilis® IBR Marker Live

The UK's leading IBR vaccine

