



Control of Infectious bursal disease - Recent trends

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Infectious Bursal Disease (IBD) is continuing as one of the major causes of worry to poultry farmers. As a result, there has been a lot of discussions and trials so as to recommend an authentic vaccination schedule. Still the disease seems to be uncontrollable.

Certain unique features of the virus make the control programmes difficult. Some of the problems in formulating a universal control programme are as follows.

Hardy nature of the virus

IBD virus is very stable and is resistant to heat and common disinfectants used. This virus is an extremely persistent one and it is unlikely that it will be completely eliminated even when thorough cleaning and disinfection procedures are followed.

Pathogenicity of virus

Two serotypes of IBDV are recognised and designated as serotype 1 and 2. To date, vaccines have been developed from type 1 since clinical disease has been associated with type 1 only. Serological variants of type 1 virus do occur. Vaccines prepared from classical type 1 virus require a high antigenic component to provide protection against some of the variants. Very virulent strains of type 1 are now common and are causing serious disease in many countries.

Immuno suppression

The virus, adversely affect the Bursa of Fabricius, causes profound damage to the immunological system of the bird. The bird may suffer in consequence from other diseases and may be unable to get proper protection from vaccines.

Immune status of the chicks to be vaccinated

The level of maternal antibodies in commercial chicks is highly unpredictable and is not uniform. This creates problems in determining the proper time of vaccination. Progeny from recovered birds may have good titre of maternal antibodies. This may interfere with vaccines and many times, diseases occur inspite of vaccination.

Range of vaccines

Wide ranges of vaccines of varying strength are available in the market. The choice must depend on the expected local challenge that is likely, previous history of occurrence of IBD in the farm, environmental and management factors, immune status of the birds, etc. It is extremely unwise to use a vaccine which cause very strong reaction, while it will protect against IBD, will also cause damage to the immune system of the bird. It is important that live vaccines be stable, with no tendency to revert to virulence on passage. To be effective inactivated vaccines need to have high antigenic component.

Dealing with IBD

Dealing with IBD involves a combination of appropriate vaccine usage, continually improving hygiene measures and antibody profiling.

Highest Standard of Hygiene

This will minimise or atleast delay the likely challenge to succeeding flocks. The relative stability of the virus increases the chance that once entered it will be carried over from one flock to succeeding crops. So in case of IBD sanitary precautions must be rigorously used. Formaldehyde and iodophores are recommended.

Vaccinating Parent Flocks

This enables a passive immunity to be passed to the chick to last for a time after hatching. Vaccination may be done 15 days prior to start of laying. Inactivated vaccines may be used in breeders as primers. Killed oil adjuvant vaccines can be used to boost and prolong immunity in breeder flocks.

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