

Construct your electronic library on poultry health

To receive your regular updates please send your email address to:

bytes@positiveaction.co.uk



The Chemical Company



Pathogenesis

Young chicks exposed to avian encephalomyelitis virus in the field have a primary infection of the intestines which progresses to a viraemia. This leads to infection of the internal organs and finally to infection of the central nervous system. Virus commonly persists in the central nervous system.

In older birds the tissue distribution of the virus is limited. No virus is found in the central nervous system, hence the absence of nervous clinical signs.

Treatment

There is no treatment for avian encephalomyelitis. After a flock has been through an outbreak of avian encephalomyelitis no subsequent evidence of infection is normally seen.

Immunity

Recovery from infection is followed by the formation of circulating antibodies that are able to neutralise viral infection. Passive or maternal immunity passes from mother to her offspring via the egg yolk.

Diagnosis

Diagnosis is by clinical signs, post mortem findings, including brain histopathology, and virus isolation, often from the brain. ELISA and PCR can be used for antibody detection.

The differential diagnosis should include Newcastle disease, equine encephalomyelitis infection, rickets, encephalomalacia, riboflavin deficiency and Marek's disease.

Vaccination

Avian encephalomyelitis can be controlled by vaccinating breeder flocks before point of lay so the virus can not be spread by downwards vertical transmission and so that progeny chicks can be protected by maternal immunity during their susceptible period during their first three weeks of life. Typically live, embryo propagated, but not embryo adapted, vaccines are used.

It is important that a vaccine virus does not become embryo adapted because if it does it will lose its ability to infect via the intestinal tract and thereby loses its efficaciousness.

Alltech	Henke-Sass Wolf	Norel
Aveve Biochem	Hubbard	LCB Foods Safety
Biomin	Hydro Systems	Plumatech
Biopoint	Impextraco	Potters Poultry
Elster	LUBING	Val-co
Grimaud Frères	Meriden Animal Health	Vencomatic
CID Lines	Amlan International	Danisco