



Aviagen Indian River

Lubing

Invesa

Orka

CID Lines

Ziggity

Henke Sass Wolf

Plumatech

Biomin

Sanovo

Rotem • Chr. Hansen
ISA • Microplus • Hato
Vitfoss • Dacs • Intracare
Marshall • Hysolv • ATK
Scitech • Fienhage
Novogen

Aetiology

Avian nephritis virus is an astrovirus that causes an acute, highly contagious, typically subclinical infection in young chickens that causes renal lesions. Avian nephritis virus is widely distributed in Japan and has been seen in certain European countries.

Pathogenicity and pathology

The only known clinical disease with renal lesions is in young chickens and field viruses of varying pathogenicities appear to occur.

Transmission readily occurs by direct contact or indirectly via fomites. Egg transmission may occur. The virus is first detected in faeces two days post infection with maximum shedding four to five days post infection. The virus is widely distributed in gut, renal, splenic and hepatic tissues but not so in respiratory and nervous tissues.

Post mortem findings are mild to severe swelling and discolouration of the kidneys and visceral urates are seen.

Under field conditions clinical signs range from none to so called 'baby chick nephropathy' and 'runting syndrome'

Diagnosis

Diagnosis ideally requires the isolation and identification of the causal agent either directly or via immunofluorescence.

Serology

Recovering chickens typically show an immunological response that can be detected/ measured by the virus neutralisation test or ELISA.

Differential diagnosis

This must consider nephrotoxic strains of infectious bronchitis and differentiating these two is not an easy task.

Treatment

There is no specific treatment.