Avian Infectious Bronchitis: Specific Lachrymal IgA Level and Resistance against Challenge

Toro,

Fernandez,

Since circulating antibody titres against infectious bronchitis virus (IBV) often correlate poorly with protection against re?infection, the lachrymal specific IgA level of IBV vaccinated chickens was evaluated as an indicator of resistance against challenge. For this purpose, the post?vaccination (pv) IBV specific lachrymal IgA response was monitored in 30 chickens at 3?day intervals until a rise of this specific isotype was detected. On day 19 pv, all birds (vaccinated group and non?vaccinated controls) were challenged with the moderately attenuated H?52 IBV strain via the ocular route. Protection was assessed by viral reisolation attempts in SPF embryonated chicken eggs (ECE) from tracheal swabs 4 days after challenge. Virus was detected in all control birds by the second passage in ECE. IBV was reisolated from 27 % (eight birds) of all H?120?primed birds after five passages in ECE. These results demonstrate that lachrymal?fluid?specific IgA levels in chickens are associated with re