LETTER TO THE EDITOR

Avian leukosis virus subtype A and subtype J in different flocks with tumor disease

Virus de leucosis aviar subtipo A y subtipo J en diferentes bandadas con enfermedades tumorales

Dear Editor:

Avian leukosis virus (ALV) is the causal agent of the most common naturally occurring avian retroviral infections causing neoplastic disease and other production problems in chickens. There are six well-characterized chicken subgroups of ALV (A to E and J). Viruses of subgroups A, B and J occur as common pathogenic exogenous viruses in the field. ALV infections with subgroups A (ALV-A) and subgroups B (ALV-B) have had a significant impact in the commercial layer flocks, both are associated with lymphoid leukosis (B-cell lymphoma) producing mortality after sexual maturity and lowered egg production. Subgroups J (ALV-J) is associated with myeloid leukosis and other production problems in meat-type chickens.

Two different chicken flocks with tumor illness outbreaks, designated L and R, from local commercial breeding were sampled for ALV diagnosis. The main symptoms in the flocks L included weight loss, anemia and high mortality. The necropsy showed grayish-white nodules of different sizes commonly observed on liver, intestine and oviducts. In the flocks R, the main lesion was a tumor development in liver, spleen, kidney and the intestinal tract, including hemangiomas.

DNA extracted from liver, spleen and tumors of both flocks were used to screen avian leucosis virus by PCR. Samples from flocks L gave an ALV-A specific 694-base pair product using H5 and capA primers. However, the samples from flocks R were positive to ALV-J specific 545-base pair product using H5 and H7 primers.

The circulation of avian leukosis virus subgroups A and J in our poultry suggests the necessity to study the epidemiological situation of ALV in our country.

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