

عنوان مقاله:

Sequencing of pigeon circovirus and the first report of identification of beak and feather disease virus in clinical specimens of domestic pigeons

محل انتشار:

گفتمان پژوهش دامپزشکی، دوره 15، شماره 3 (سال: 1403)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Hadi Shabani – Department of Livestock, Poultry and Aquatic Animal Health, Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz,
Ahvaz, Iran

Forough Talazade – Department of Livestock, Poultry and Aquatic Animal Health, Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz,
Ahvaz, Iran

Gholam Abbas Kaydani – Department of Laboratory Sciences, School of Allied Medical Sciences, Ahvaz Jundishapur University of Medical Sciences,
Ahvaz, Iran

Masoud Reza Seyfi – Department of Pathobiology, Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz, Ahvaz, Iran

خلاصه مقاله:

An internationally recognized syndrome that leads to deaths among domestic and ornamental pigeons, particularly after racing, is young pigeon disease syndrome (YPDS). Pigeon circovirus (PiCV) is regarded as one of the potential factors contributing to the occurrence of YPDS. This survey was conducted to determine the prevalence of PiCV infection and molecularly characterize the PiCV in pigeons suspected of YPDS. Eighty fecal samples were collected from ۸۰ diseased pigeons (exhibiting symptoms such as lethargy, weight loss, crop stasis, vomiting and diarrhea) from ۲۰ lofts in different areas of Ahvaz, Iran. Also, ۲۰ fecal samples were obtained from ۲۰ clinically healthy pigeons. The nested broad spectrum polymerase chain reaction test was done to identify the circovirus, using primers targeting part of the replication-associated protein gene with ۳۵۰ bp, and several positive samples were sequenced. This study showed that PiCV was detected in ۸۶ out of the ۱۰۰ samples (۸۶.۰۰%). Two types of circoviruses were determined in the samples. One type of the detected circoviruses was PiCV which based on phylogenetic analysis had high genetic similarity with A, B, G and H genotypes of PiCV. The other type of detected circoviruses was closely related to beak and feather disease virus (BFDV) which causes one of the most significant viral diseases in psittacine birds. This is the first report of BFDV identification in pigeons.

کلمات کلیدی:

Circovirus, Columba livia domestica, Psittacine beak and feather disease, Phylogenetic analysis, Young pigeon disease syndrome

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1941043>

