

The H5N8 Virus: A New Emerging Influenza

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Dear Editor,

Infection is an important problem in clinical medicine, and there are multiple infections that may occur in the present day. In medicine, there have been many new emerging bacterial, viral, and parasitic infections reported from several areas of the world. Of these new diseases, emerging influenza is a present public health threat that can be seen globally. As a respiratory infection, emerging influenza is expected to be a serious disease that can have a worldwide impact. Within the past decade, several new influenza infections have emerged (H5N1, swine flu, etc.); some cross species to infect human beings. In relation to Iran, the recent swine flu (H1N1) became a great concern throughout the Middle East (1). Thus, it is necessary to have a monitoring system to deal with new emerging influenzas.

Here, the authors discuss the emerging H5N8 influenza virus. This is a virus that has only been mentioned in medicine for two years. In 2014, there was a report on this virus from eastern China, where it was successfully isolated from domestic ducks (2). Thus, the new H5N8 influenza can be classified into the avian influenza group. According to Fan et al. this infection causes respiratory problems among birds; the researchers concluded that “wild birds could acquire the H5N8 virus from breeding ducks and spread the virus via migratory bird flyways” (3). This is similar to the new avian influenza viruses that have previously emerged.

Birds and poultry have been focused on as the animals that harbor the H5N8 virus; moreover, there is concern over the possibility that the birds and poultry could bring the disease to human beings as a cross-species infection. Wu et al. noted that this virus “may pose health risks for humans” (2). Furthermore, Adlhoch et al. claimed that the “risk of zoonotic transmission and prevention of human cases” are very important (4). From its origin in China, the virus has already been seen in Europe (4) and United States (5). The infection has been spread over a wide area around the world, and many birds are already infected; hence, human infection can be expected in the

near future, as in the previous case of H5N1 bird flu.

There are some reports on the topic of the possibility of cross species-infection. According to the report by Kim et al. the virus “exhibited detectable human virus-like receptor binding and replicated in human respiratory tract tissues” (6). Indeed, the possibility of cross species infection of H5N8 influenza has been widely discussed in many publications (6, 7), and this represents an important topic for further study in respiratory medicine. Further researches on the infectivity and pathogenesis of the new H5N8 influenza virus in animal models that can further refer to the situation in human beings are recommended.

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