

Neurological Manifestation in New Emerging H7N9 Influenza: an Issue in Neurology

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Abstract-

The emerging of new H7N9 influenza virus infection in February 2013 brings attention of world health scientists on its possibility to cause worldwide pandemic. The new H7N9 bird flu is a new disease manifesting with acute respiratory features plus additional atypical clinical manifestations. Of those atypical clinical features, neurological presentation is an interesting issue. This work presents the summary on evidence on neurological manifestation in new emerging H7N9 influenza.

Key Words: H7N9, influenza, neurology

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The emerging of new H7N9 influenza virus infection in February 2013 brings attention of world health scientists on its possibility to cause worldwide pandemic⁽¹⁾. This disease was firstly identified as a severe respiratory infection with unknown pathogenic cause. Finally, the new virus can be identified and it is confirmed that the new H7N9 bird flu is the new emerging viral infection⁽²⁻³⁾.

The new H7N9 bird flu is a new disease manifesting with acute respiratory features plus additional atypical clinical manifestations. Of those atypical clinical features, neurological presentation is an interesting issue. This work presents the summary on evidence on neurological manifestation in new emerging H7N9 influenza.

Neurological disorder in new H7N9 influenza

Neurological manifestation can be observed in the

patients infected with new H7N9 influenza. According to the report on 111 infected cases, the finding of neurological disorder is not significant⁽⁴⁾. However, almost all infected cases usually present the complaint of dizziness as well as decreased level of consciousness⁽⁴⁻⁵⁾. Also, it is noted that multiple organ involvement is common in the severe cases and the neurological signs as alteration of consciousness can be seen⁽⁴⁻⁵⁾. According to the case series reported from Huzhou, one-sixth of the cases manifested muscle weakness⁽⁶⁾.

The question is whether the new H7N9 influenza virus can cause direct pathology to neurological system or not. The recent publication in Science might be the clue for this query⁽⁷⁾. According to the animal model, it is proved that the H7N9 influenza can infect into the brain tissue and this might be the possible explanation for the observation on the neurological manifestations in

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severe H7N9 influenza cases.

The abnormality in neurological system can be seen in the patients with H7N9 influenza and this is the point for closed monitoring in patient management.

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