Level of transaminase enzymes in the reported cases of bird flu infection in Thailand

Dear Editor:

Bird flu or avian flu, caused by H5N1 virus, is a new emerging infectious disease. There has been worldwide situation regarding avian influenza infections in poultry from 1997 (1). Kida noted that this H5N1 virus jumped the species barrier and caused severe disease with high mortality in humans in Vietnam and Thailand (2). Most infected cases usually developed progressive pneumonia with acute respiratory distress syndrome and consequently died.

Here, the author performs this mini-study in order to document the impact of bird flu infection on level of transaminase enzymes among reported Thai patients. A literature review on the papers concerning human bird flu in Thailand was performed. The author performed the literature review human bird flu infection reports in Thailand from database of the published works cited in the Index Medicus and Science Citation Index. The author also reviewed the published works in all 256 local Thai journals, which is not included in the international citation index, for the report of human bird flu infection in Thailand. The reports that contained no complete data were excluded for further analysis.

According to this review, there are 6 reports (3-8) covering 12 Thai patients with confirmed diagnosis of bird flu. However, the complete data for level of transaminase enzymes were available on only 6 patients. The reported SGOT ranges from 120 to 790 U/l with average value equal to 367.8 + 80.2 U/l (median = 280 U/l). The reported SGPT ranges from 43 to 150 U/l with average value equal to 80.2 + 46.4 U/l (median = 52 U/l).

Here, the elevation of the transaminase enzymes, especially extremely elevation of SGOT, can be seen. These findings agree with the report on the outbreak in Hong Kong that liver dysfunction was common (9). This can imply that hepatitis might be an important manifestation of human bird flu infection. The H5N1 itself might have some process causing liver pathology.

V. Wiwanitkit

Department of Laboratory Medicine. Faculty of Medicine. Chulalongkorn University. Bangkok, Thailand

References