Hantavirus infection – rodent borne zoonosis

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Zoonosis is a collective term for the infectious diseases that is transmissible from vertebrate animals to humans. Various kinds of animals play an important role to maintain pathogens such as bacteria, virus or parasite in nature as well as for source of human infection. In generally, animal hosts show no sign of disease, but are persistently possess pathogens. This host and parasite relationships might be established after many years co-evolution and adaptation evens. Thus, they are called as “reservoir” animal. Among various reservoir animals, rodent plays a role as a reservoir host of various causative agents of zoonoses. Particularly urban rats (Rattus spp.) are important source of human pathogens because they inhabit in the vicinity of human dwellings.

Hantavirus is a causative agent of two acute febrile diseases, hemorrhagic fever with renal syndrome (HFRS) in Euro-Asia and hantavirus pulmonary syndrome (HPS) in North and South Americas. As same to other many zoonotic agents, hantavirus is persistently infected in rodent without sign of disease. Virus transmit to humans via inhalation of virus contaminated urine and feces. More than hundred thousands patients annually have been reported in worldwide. Thus, hantavirus infection is known as a typical rodent borne zoonosis.

In this presentation, characteristic of hantavirus ecology in nature and prevalence of infection in worldwide including South East Asian countries will be introduce.