INTRODUCTION

With special grants for research on “cestode zoonoses in Asia and the Pacific” in the programs of “the Japanese international leadership in science and technology” from the Ministry of Education, Japan (2003-2005), and on “the establishment of collaboration research center for parasitic zoonoses in Asia and Africa” in the programs of the Asia-Africa Science Platform from the Japan Society for the Promotion of Science (JSPS) (2006-2008), Asahikawa Medical College (AMC) has been organizing several international symposia on parasitic zoonoses, mainly cestodes zoonoses in the Asia-Pacific region (Ito 2007). The Japan Science Council launched the 21st Pacific Science Congress (PSC 21) in Okinawa, Japan on 12-18 June 2007. The Japan Society of Tropical Medicine (JSTM) proposed several symposia, and three symposia recommended by JSTM were adopted by the organizing committee of PSC 21 at the session entitled “Threats, challenges and hazards: climate change, natural hazards, chronic and infectious diseases and public health, and hazardous waste”. These were 4-7) The present situation of cestodes zoonoses in Asia and the Pacific (organized by Ito A, AMC), 4-8) Tropical medicine and area studies in Asia and Pacific: Integration towards the better population health of the region (organized by Moji K, Nagasaki University), and 4-19) Response of vector mosquitoes to the environmental change (organized by Takagi M, Nagasaki University).

Cestode zoonoses including echinococcosis, neurocysticercosis and sparganosis caused by larval stages of various cestode species and taeniasis and diphyllobothriasis by adult tapeworms were discussed with special focus on the Asia-Pacific region. Both cysticercosis and echinococcosis are included on the WHO list of emerging and re-emerging infectious diseases and neglected infectious diseases with other bacterial and virus infections. Echinococcosis, either cystic (CE) or alveolar (AE), poses a risk to people living with dogs (and foxes) in which the parasite life cycle is maintained. In contrast, neurocysticercosis is more complicated. It is caused by the uptake of eggs of Taenia solium, which are released from taeniasis patients infected by eating pork contaminated with the larval stage, cysticerci of T. solium. This condition is therefore widely distributed except in Jewish and Muslim societies. However, the recent waves of globalization make it more complicated. Sparganosis is not rare in the Asia-Pacific region. Taeniasis and diphyllobothriasis caused by eating undercooked meat, either pork or beef, or ocean fish are also common in the region. Such cestode zoonoses were overviewed from the genome to the endemic field and discussed with special focus on the Asia-Pacific region. Nakao M presented an overview entitled “The contribution of mitochondrial genomics to the phylogeny and epidemiology of zoonotic tapeworms”. Other presentations included “Taeniasis/cysticercosis in Indonesia, 1996-2006” by Wandra T, “Cysticercosis and taeniasis in Thailand” by Anantaphruti MT, “Is Asian Taenia species or subspecies?” by Okamoto M, “On diphyllobothriasis and sparganosis in Indonesia” by Margono SS, “Significance of molecular-pathological diagnosis in cestode zoonoses” by Yamasaki H, “Echinococcosis on the Tibetan plateau, China” by Qiu DC, “Epidemiological transmission and control of animal echinococcosis” by Takashiki K, “Why multidisciplinary is essential in infectious disease ecology; the Echinococcus multilocularis case” by Giraudoux P, “Human echinococcosis: a neglected disease?” by Craig PS, and “The present situation of taeniasis/ cysticercosis in Asia and the Pacific: the importance of molecular and immunological approaches” by Ito A.

As easily recognizable from these titles, the symposium aimed to review the updated information on cestodes
zoonoses in the Asia-Pacific region with stress on the present situation in Indonesia, China, Thailand and Japan as well as the global situation. Another important issue is the challenge to develop more reliable diagnostic tools and to understand the evolution in zoonotic cestodes using molecular and ecological tools to determine the transmission ecology in cestodes zoonoses. So, the topics included almost all subjects behind the diseases including molecular biology and immunology for diagnosis and evolution, pathology, epidemiology, anthropology, ecology, economy, traditional socio-cultural aspects.

Several of the speakers dwelled on topics similar to their previous talks at the joint meetings of 5th Seminar on Food- and Water-borne Parasitic Zoonoses, Joint International Tropical Medicine Meeting 2006, and 6th Asia-Pacific Travel Health Conference held on 28 November - 1 December, 2006 in Bangkok, Thailand [1].

In this special issue of Tropical Medicine and Health, I am pleased to publish five papers from the 4-7) symposium held on 14 July 2007.

REFERENCES