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Brief historical remarks as an introduction for the international symposium on taeniasis/cysticercosis and echinococcosis

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This introduction article is dedicated to my best friend, Prof. Akihiko Yano, Chiba University, Japan, an outstanding immunoparasitologist working on toxoplasmosis, the editor-in-chief of Asian Parasitology Series Monograph (6 volumes) sponsored by MEXT and published in 2005, and one of the committee members of the Asahikawa meeting in 2005, who passed away on 10 November 2005.

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Abstract

Some historical remarks are made on the background information leading to the international symposium on taeniasis/cysticercosis and echinococcosis with focus on Asia and the Pacific.

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1. Brief personal historical remarks

Meetings have been held on taeniasis/cysticercosis or echinococcosis in many international conferences or congresses, but they are usually organized separately. Therefore, we have few chances to discuss both taeniasis/cysticercosis and echinococcosis together at the same meetings. The first combined meeting was organized in 1982 in Czechoslovakia [1]. The meeting was simultaneously the venue for preparation of the first WHO Guidelines for Surveillance, Prevention and Control of Taeniasis/Cysticercosis [2] when Drs. Z. Matyas and Z. Pawlowski from WHO invited contributors and advisors for preparation of the guidelines, including Prof. Lord E.J.L. Soulsby, the late Prof. J.D. Smyth, and Dr. M.A. Gemmell and many other active researchers. These guidelines were updated in 2005 [3]. A second international symposium was held in Czechoslovakia in 1985. Here a Russian group reported on *Taenia saginata* from brains of reindeer but not cattle [4]. Was this real *T. saginata*? This has still not been confirmed by molecular typing. It is now known that in Southeast Asia, there are two sister-species, *T. saginata* and *Taenia asiatica* which can be differentiated by molecular analysis but not by

macroscopic morphology [5–11]. It is essential to analyze the mitochondrial DNA of such specimens from taeniasis patients. In 1986, the 3rd International Cestode Symposium organized by Dr. Mike Rickard was held at the University of Melbourne, Australia. At that meeting, many of the senior scientists, who attended the Asahikawa symposium, met for the first time.

2. New waves for international collaborations in China

From 1990, there were several new joint collaborative projects in China, not only on the cestode zoonoses but also on many other parasitic and/or infectious diseases. Prof. P.S. Craig, University of Salford (UK) started an international collaboration project in 1987 on the epidemiology of echinococcosis in Gansu and Xinjiang with the support from the Wellcome Trust and the European Commission [12]. Prof. F Andersen [13] and Dr. P.M. Schantz carried out pilot control projects in Xinjiang funded by the Thrasher Foundation [14]. In 1997 Dr. D.D. Heath started a New Zealand–China bilateral project for control of cystic echinococcosis in domestic animals in Tibetan area of Sichuan province [15]. Because the author (Prof. A. Ito) was involved in these projects primarily for serological analyses, he organized a small but functional international workshop entitled “Towards multilateral collaboration and cooperation for the control of echinococcosis, cysticercosis and other parasitic zoonoses in western China”

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in Chengdu, China in July 2000 [16]. The late Dr. C. Urbani from WHO-Hanoi, who discovered the cause of severe acute respiratory syndrome (SARS) in Vietnam and died of SARS on 29 March 2003, attended this Chengdu meeting as his first official job at WHO-Hanoi. In September 2000, P.S. Craig and Z.S. Pawlowski organized an international symposium on echinococcosis and cysticercosis in Poznan (Poland) as a NATO Scientific meeting [17]. Ito and Urbani also organized an international symposium on cysticercosis at the Third International Seminar on Food-Borne Parasitic Zoonoses in December 2000 [18]. Urbani was keen to investigate the prevention and control of cysticercosis and echinococcosis in Vietnam and other neighboring countries and invited Ito and Craig to be consultants to WHO-Hanoi for cestode zoonoses in Vietnam, however, he unfortunately passed away before this could be initiated [16].

3. New waves for international collaborations in Indonesia

Another wave of collaborative projects occurred on cysticercosis in Indonesia and other southeast Asian countries [11,19–21]. Because the Asahikawa Medical College (AMC) research group had established highly reliable serological tests, not only for echinococcosis in humans, but also for cysticercosis in humans, pigs and dogs [22–27], an international collaboration project on the sero-epidemiology of cysticercosis in Papua (former Irian Jaya), Indonesia started from 1996 just after the Australian Society for Parasitologists organized the PASEAN Conference 1996 in Bali [19]. As treatment of taeniasis patients or worm carriers of *T. solium* is a key issue for prevention and control of human cysticercosis [28], both Craig and Ito started joint projects with Indonesian counterparts at the University of Indonesia, and CDC and EH, Ministry of Health, Indonesia [29].

4. Special fund for the 2005 International Cestode Symposium

In early 2003, Ito had wished to submit a special proposal for the Ministry of Education (MEXT), Japan, and contacted with Dr. Lorenzo Savioli at WHO-Geneva. Savioli thoroughly supported the idea and Ito was successful in obtaining the special MEXT fund for 3 years (2003–2006). The project was entitled “Establishment of a network for taeniasis/cysticercosis and echinococcosis in Asia and the Pacific through evidence based scientific, international collaborations”. Many researchers in Asia and the Pacific region, where these cestode infections are endemic as well as many other infectious diseases, have little knowledge of how to carry out evidence based scientific work, especially using advanced technologies.

5. Function of FAO and WHO

In order to encourage local research on control of cysticercosis/echinococcosis and to establish good international collaborations through original contributions in science and technology, Ito's group began to develop: (1) molecular and immunological tools for more reliable identification and

differentiation of the parasites and diseases caused, (2) technical transfer seminars for those who were keen to do laboratory analysis as collaboration projects using specimens from local endemic areas, either parasite materials or serum samples or any other issues, and (3) organization of two international symposia in 2003 [30] and the current one in 2005 [31]. The most important basic philosophy is “Dig the very place where we stand on, then we will find a good spring!” I sincerely expect that we in Asia and the Pacific can make our own original contributions to science and technology using our own materials from our home countries in order to control these infectious diseases. For such actions, we need international collaborators who are willing to join us with high appreciation of the local contribution. We sincerely do expect that such encouragement for meaningful international collaborations may be available from both FAO [32] and WHO [33].

The Organizing Committee for the Asahikawa meeting selected important topics “from the molecule to the field” to meet the interest of all participants. All topics were chosen based on original scientific contributions, since originality is one of the most important philosophies that we all appreciate. Speakers from all over the world were invited to review scientific developments on cestode zoonoses for the encouragement of all participants, especially those from the Asia and Pacific regions.

A total of 76 papers by invited speakers were presented. Due to the limited time for publication of this supplement, only 53 papers submitted on time were accepted for publication. All other topics not included in this supplement were also highly informative and hopefully will be published elsewhere in the near future.

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On behalf of the Organizing Committee, I greatly appreciate MEXT for the full sponsorship of the Symposium. In addition I would like to thank the members of the International and Japanese Organizing Committee for their great efforts toward the success of the symposium. Thanks also to all participants for their active participation and valuable contributions through their presentations, discussions and submission of excellent manuscripts. It is a great honour and pleasure for me to have helped to set up a new platform in Asahikawa Medical College for future collaboration and cooperation in the control of cestode zoonoses.

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