

POSTER PRESENTATION

Open Access

Can we eradicate Cysticercosis?

Thierry Franchard^{1,2*}, Remy Guebey², Julien Razafimahefa³, Marcellin Andriantseho³, Harentsoaniaina Rasamoelina⁴, Ronan Jambou^{1,5}From Institut Pasteur International Network Annual Scientific Meeting
Hong Kong. 22-23 November 2010

Man is the only known definitive host of the tapeworm *Taenia solium* and becomes a carrier by eating undercooked pork contaminated with “*Cysticercus cellulosae*” (cysticerci). Pigs act as intermediate host and acquire cysticercosis by ingestion of eggs or proglottids from human feces, which develop into cysticerci within tissue mostly without causing clinical symptoms in the host. Cysticercosis occurs in man in a context of “Fecal peril” by ingestion of egg-contaminated soil, water or vegetation or by auto-infestation. In theory separation of swine from humans, good cooking practice and hygiene should lead straightforwardly to the eradication of the disease! However cysticercosis is still a major public health problem in endemic regions with more than 50 million infected people and is now a re-emerging disease in industrialized countries due to human migration. It is also the second cause of seizure in tropical countries. So what are the pitfalls in cysticercosis control and what can we do?

Cysticercosis affects free roaming pigs with access to sites contaminated with human feces. Development of good rearing practice guides will be of major impact. Only few tools are available for ante-mortem diagnosis of porcine cysticercosis and tongue palpation remains the most commonly used tool. Therefore, the development of a rapid diagnostic test, usable in villages, to test cattle will be the second weapon. However, this will need recombinant antigens. Diagnostic obstacles also affect human patients presenting with seizures. Scans and biological tests are not readily available leading to the repeated treatment of patients.

New target proteins are thus needed to develop these tests. With the sequencing of *T. solium* genome which will allow identification and production of recombinant protein a new step in the right direction was made. Now a large advocacy to raise funds in order to get this

strategy on track is needed. Here we summarize the current state of the disease, practical issues linked to the organization of a feasible control system in developing countries and new data available all over the world and in particular in Madagascar to sustain this advocacy.

Author details¹Institut de la Francophonie pour la Médecine Tropicale, Vientiane, Lao PDR.²Institut Pasteur de Madagascar, Antananarivo, Madagascar. ³Hôpital Befelatanana, Antananarivo, Madagascar. ⁴Direction de la recherche zootechnique et vétérinaire, Antananarivo, Madagascar. ⁵Département de Parasitologie Mycologie, Institut Pasteur, Paris, France.

Published: 10 January 2011

doi:10.1186/1753-6561-5-S1-P56

Cite this article as: Franchard et al.: Can we eradicate Cysticercosis? *BMC Proceedings* 2011 **5**(Suppl 1):P56.**Submit your next manuscript to BioMed Central and take full advantage of:**

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit¹Institut de la Francophonie pour la Médecine Tropicale, Vientiane, Lao PDR
Full list of author information is available at the end of the article