



Is *M. ulcerans* able to colonize neuronal cells?

Submitted by a.bergoend on Wed, 05/13/2015 - 15:38

Titre Is *M. ulcerans* able to colonize neuronal cells?

Type de publication Communication

Type Communication sans actes dans un congrès

Année 2011

Date du colloque 28-30/03/2011

Titre du colloque 14th annual meeting on Buruli ulcer

Pagination 103

Auteur Marion, Estelle [1], Deshayes, Caroline [2], Dantec, C. [3], Garcion, Emmanuel [4], Stinear, Timothy P [5], Letournel, L. [6], Eyer, Joël [7], Marsollier, Laurent [8]

Pays Suisse

Editeur World Health Organization

Ville Genève

Résumé en anglais Buruli ulcer, or *Mycobacterium ulcerans* infection, is an emerging disease, principally diagnosed in humid tropical countries and inducing large skin ulcers. These lesions are painless, a distinct feature that suggests that the mycolactone toxin and/or *M. ulcerans* impedes the signal transmission by the nervous system. In this context, the aim of this work was to study the interaction between *M. ulcerans* and neuronal cells by using in vitro and in vivo models. We showed that a virulent strain of *M. ulcerans* is able to enter into neurons cultivated from neonatal rat hippocampus. On the contrary, this phenomenon was less observed with a mycolactone-deficient strain. To support these data, we analysed nerve fibres from mouse-infected tissues and few bacilli were found in close contact with nerve fibres. The invasion process established by *M. ulcerans* to colonize the nervous system remains uncharacterised, but we hypothesise that this ability could be involved in the painless of the *M. ulcerans* infection.

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Lien vers le document http://www.who.int/buruli/information/Buruli_meeting_Abstracts_2011_ENG.pdf [10]
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Liens

[1] <http://okina.univ-angers.fr/estelle.marion/publications>

[2] <http://okina.univ-angers.fr/c.deshayes/publications>

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