RISK FACTORS FOR EPILEPSY IN RURAL LAO PDR: A CASE-CONTROL STUDY

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Abstract. The objective of this study was to assess the major etiologic categories of epilepsy in a rural district of the Lao PDR. Thirty-one newly identified patients with confirmed active epilepsy were compared with 124 controls, matched for gender, age and village residence. Risk factors for epilepsy were investigated with particular focus on cysticercosis serology. A history of head trauma (OR=4.7, p=0.05), family history of epilepsy (OR=12.8, p=0.03), and the use of human feces to fertilize domestic vegetable gardens (OR=4.9, p=0.04) were significantly associated with epilepsy. The study did not confirm any direct relation between epilepsy and cysticercosis serology. The cysticercosis seroprevalence was nil in the epilepsy group. This is the first study in the Lao PDR on epilepsy risk factors representing important data for the sub-region. Parasitic, environmental, and behavioral factors of this traditional population deserve further studies to explain the missing link between epilepsy and cysticercosis.