

HYPOALBUMINEMIA AS A PREDICTOR OF DIARRHEA CAUSED BY *BLASTOCYSTIS HOMINIS*

Pongsakorn Laodim^{1,2}, Pewpan M Intapan^{1,2}, Kittisak Sawanyawisuth^{2,3},
Thidarat K Prasongdee^{1,2}, Porntip Laummaunwai^{1,2} and Wanchai Maleewong^{1,2}

¹Department of Parasitology, Faculty of Medicine, ²Research and Diagnostic Center for Emerging Infectious Diseases, Khon Kaen University, ³Department of Medicine, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

Abstract. *Blastocystis hominis* is an intestinal protozoan found worldwide, particularly in developing countries, that may cause gastrointestinal symptoms, including diarrhea. We conducted a hospital-based study to identify clinical factors predictive of diarrhea caused by *B. hominis*. We studied patients with positive stool samples for *B. hominis* by formalin ethyl acetate concentration technique at Srinagarind Hospital, Khon Kaen University, Khon Kaen, Thailand between 2003 and 2010. Patients were divided into diarrhea and non-diarrhea groups. Diarrhea patients were categorized if the diarrhea was associated with *B. hominis* only. In total, 81 patients with isolated *B. hominis* infection were studied. Of those, 17 patients (21%) had diarrhea associated with *B. hominis* infection. Eight variables were included in the final model predicting diarrhea caused by *B. hominis* on multiple logistic regression analysis. Only serum albumin level was significantly associated with diarrhea cases in this study with an adjusted OR of 0.162 and a 95%CI of 0.027- 0.957. Hypoalbuminemia is associated with diarrhea associated with blastocystosis.

Keywords: *Blastocystis hominis*, predictors, diarrhea, blastocystosis

Correspondence: Kittisak Sawanyawisuth,
Department of Medicine, Faculty of Medicine,
Khon Kaen University, Khon Kaen 40002,
Thailand.

Tel: 66 (0) 43 363664; Fax: 66 (0) 43 348399

E-mail: kittisak@kku.ac.th