of echinococcosis in Colombia showed that no previous cases have been reported from Huila, and even more, before the current cases (first reported in 35 years), only 3 previous reports were made. The review described 303 cases during 2009-2013, all of them due to *E. granulosus* and *E. multilocularis* (no cases of *E. vogeli* nor *E. oligarthrus* were reported). These recent cases highlights the possible emergence of this pathogen in certain areas of Colombia.

https://doi.org/10.1016/j.ijid.2018.04.4112

UMP. 584

Cytokines, endothelial activation and microvascular dysfunction in acute respiratory syndrome due to Plasmodium vivax

N. Ghanchi[1,*], A. Raza[2], M. Beg[3], A. Zubairi[4]

[1] *Aga Khan University, Microbiology, Path & Lab Medicine, Karachi/PK, Pakistan*
[2] *Dadabhoy Institutes of Higher Education, Dadabhoy Institutes of Higher Education, SNPA - 17/B, Block 3, K.C.H.S, Karachi, Karachi, Pakistan*
[3] *Aga Khan university, Pathology and Laboratory medicine, Karachi, Pakistan*
[4] *Aga Khan university, department of medicine, Karachi, Pakistan*

Background: *Plasmodium vivax*, previously considered benign, is now recognized as capable of causing severe disease syndromes associated with fatal outcomes. Endothelial activation is associated with circulating parasites, and systemic inflammation may contribute to pathology in vivax malaria. Microvascular dysfunction likely contributes to impaired tissue perfusion. Severe vivax malaria due to acute lung injury/acute respiratory distress syndrome (ARDS) may be linked to microvascular dysfunction in that organ. We carried out a study of vivax malaria patients with uncomplicated infection or ARDS as cases and compared them to healthy controls.

Methods & Materials: Fifty vivax malaria patients (microscopy confirmed) were classified as having uncomplicated infection (n = 25) or severe malaria due to ARDS (n = 25) applying the standard WHO definition of sever malaria. Healthy controls (n = 50) participated in this study voluntarily with no history of malaria. Concentrations of cytokines, TNF- α,IL-6, IL-10 and endothelial activation markers ICAM-1 (intracellular adhesion molecule-1),VCAM-1(vascular adhesion molecule-1) and E-selectin were determined by enzyme-linked immunosorbant assay (ELISA).Correlation of cytokines and endothelial activation markers was done using Pearson two way correlation matrix. The significance of biomarkers as indicators of disease severity was examined by multi-variate analyses.

Results: Cytokines levels in all vivax malaria cases were compared with healthy controls and found to be significantly elevated. Healthy Vs uncomplicated *P.vivax* malaria, Selectin (9809 vs. 41622 pg/ml, p = 0.0001), ICAM (1089 vs. 255 pg/ml, p = 0.03), TNF (181 vs. 137 pg/ml, p = 0.3), IL6 (369 vs. 90 pg/ml, p = 0.001), IL10 (65 vs. 1001 pg/ml, p = 0.003) compared to healthy controls. Biomarkers levels in uncomplicated vs Pv- ARDS; E-Selectin (4162 vs. 66043 pg/ml, p = 0.03), ICAM (1089vs. 1895 pg/ml, p = 0.03), TNF (181vs. 520 pg/ml, p = 0.001), IL10 (1001 vs. 4753 pg/ml, p = 0.003) levels were significantly higher in ARDS severe malaria case compare to uncomplicated case.

Conclusion: Cytokine-mediated endothelial activation pathway is a possible mechanism of pathogenesis in severe *P. vivax*. Increase levels of IL-10 and TNF may be plausible biomarkers of ARDS in *P. vivax* infection. However, further studies are required to understand the relevance of cytokines in manifestations of ARDS in *P. vivax* malaria

https://doi.org/10.1016/j.ijid.2018.04.4113

UMP. 585

Neurocysticercosis in Argentina: review of 23 years (1994-2017)

J.I. Carranza[1,*], P. Machuca[1], J. Monroig[1], M. Ros[2], S. Lloveras[1], E. Lavarra[3], E. Sofia[4], C.C. Falcone[4], S.L. Garro[5], G.D. Gonzalez[4], T. Orduna[5]

[1] *Hospital F.J. Muñiz, Zoopathology, Buenos Aires, BUENOS AIRES, Argentina*
[2] *Hospital Area Program Villa Regina, Río Negro, Argentina, Villa Regina, Río Negro, Argentina*
[3] *Hospital Zonal Esquel, Chubut, Argentina, Esquel, Argentina*
[4] *Hospital F. J. Muñiz, CEMPRA-MT, Buenos Aires, Argentina*
[5] *Hospital F.J. Muñiz, CEMPRA-MT, Buenos Aires, Argentina*

Background: Neurocysticercosis (NCC) is a parasitical disease of the central nervous system (CNS) produced by the larva of Tenia solium. It is the first cause of epilepsy acquired worldwide.

The objective is to characterize the cases of NCC assisted in a hospital of the City of Buenos Aires between 1994- 2017.

Methods & Materials: Retrospective, descriptive and cross-sectional study of medical records of cysticercosis and NCC. Epidemiological, clinical and imaging characteristics were evaluated. The diagnosis was made according to the Del Brutto criteria (DBC) (Del Brutto et al., 2001).

Results: Of 122 cases with diagnosis of NCC, 74 fulfilled DBC.

Conclusion: We describe the larger case series of NCC in Argentina.

This disease is usually seen in our region and is probably underdiagnosed because the diagnosis is usually made when patients are symptomatic, and also due to the absence of gold standard method of diagnosis. It relies in scores like those of CBD.

Arriving to the diagnosis is essential, since this cause of seizures has specific treatment.

Reference

Del Brutto OH, et al. *Neurology* 2001 24;**57**(2):177–83.

https://doi.org/10.1016/j.ijid.2018.04.4114