

O101

Oral Session

An update on malaria

EPIDEMIOLOGICAL, CLINICAL AND LABORATORY PREDICTORS OF MALARIA IN PATIENTS WITH FEVER RETURNING FROM TROPICAL COUNTRIES.

D. Torr*s-Tendero¹, A. Zurita², H. Pinargote², S. Reus¹, V. Boix¹, E. Merino¹, M. Andreu³, A. Gimeno³, A. Tello², J. Portilla²

¹Unidad de Enfermedades Infecciosas, Hospital General Universitario de Alicante, Alicante (Alicante), Spain ; ²Servicio de Medicina Interna, Hospital General Universitario de Alicante, Alicante (Alicante), Spain ; ³Sección de Microbiología y Parasitología, Hospital General Universitario de Alicante, Alicante (Alicante), Spain

Introduction

Severe and complicated malaria usually occurs in non-immune persons and almost always due to a delay in diagnosis or inappropriate treatment. A common problem in many hospitals is that the test results of malaria may be delayed for long. In this situation, empirical antimalarial treatment should be administered, if the probability of malaria is high.

Objective

To identify epidemiological, clinical and haematological variables that are predictors of malaria imported in patients with febrile syndrome.

Methods

Retrospective study of patients with febrile syndrome seen in Imported Diseases Consult of HGUA since June 2000 to December 2012. A multivariate analysis was performed using logistic regression (enter method) to identify variables that show an independent association with the diagnosis of malaria. The variables included in the model are those with statistically significant association ($p < 0.05$) in the bivariate analysis.

Results

233 patients were treated with febrile syndrome. Age (median) : 34 years , 55.4 % males , 72 travelers (31 %), VFR 87 (37.3 %) and 74 immigrants (31.7%). Malaria was diagnosed in 96 cases (41.9 % of total) , 88 (91.6 %) were from sub-Saharan Africa (OR 8, 95%CI : 3.6 to 17.8 , $p < 0.0001$) , and 75 % were *P. falciparum* . In bivariate analysis the following variables were associated with the diagnosis of malaria : sub-Saharan African origin ($p < 0.0001$), VFR ($p < 0.001$), hepatomegaly ($p = 0.003$), splenomegaly ($p < 0.0001$); 250 UI/l ($p = 0,039$); BT > 1 mg/dl ($p < 0,0001$); platelets < 150.000/mm³ ($p < 0.0001$), Hb < 11 g / dl ($p = 0.011$) , LDH > 250 IU / l ($p = 0.039$) , BT> 1 mg / dl ($p < 0.0001$) 50 UI/l (0,026).> and AST > 50 IU / L (0.026) . In multivariate analysis, the variables independently associated with the diagnosis of malaria were sub-Saharan African origin (OR : 19.6 , 95%CI 5.5 to 70 , $p < 0.0001$) , total bilirubin > 1 mg/dl (OR : 4.2 , 95%CI 1.6 to 10.8 , $p = 0.003$) and platelet count < 150.000/mm³ (OR : 2.2 , 95%CI 1.1 to 4.6 , $P = 0.045$) .

Conclusions

Patients with febrile syndrome imported from sub-Saharan Africa, with total > 1 mg / dl bilirubin and thrombocytopenia <150.000/mm³ should receive empiric antimalarial treatment in cases where laboratory confirmation is not possible or is delayed in time.