

4CPS-055. EFFICACY AND SAFETY OF ARTEMISININE DERIVATIVES IN THE TREATMENT OF MALARIA

Código ATC: J01 - Antibacterianos para uso sistémico.

¹D. Gonzalez Vaquero*, ¹M.A. Castro Vida, ¹J. Urda Romacho, ¹A. Martos Rosa, ¹F. Avila Cabrera, ¹M. Aznar García, ¹P. Acosta Robles.

¹Agencia Pública Empresarial Sanitaria Hospital De Poniente, Pharmacy Department, El Ejido, Spain.

Background

Malaria is a parasitic disease caused by the parasite Plasmodium falciparum that is transmitted through the bite of infected Anopheles female mosquitoes. It is a deadly disease that requires diagnosis and urgent treatment. The treatment is based on the combination of artemisinin derivatives and another drug. In 2016, according to the latest global report of malaria, there were 216 million cases of malaria and 445000 deaths due to malaria

Purpose

To evaluate the efficacy and safety of artemisinin derivatives in the treatment of malaria.

Material and methods

We carried out a retrospective observational study in the use of piperazine 320 mg/dihydroartemisin 40 mg and intravenous (IV) artesunate from August 2017 to August 2018 in a district hospital in the south of Spain. Artesunate IV treatment was used in patients with malaria, and the severity criteria was: decreased level of consciousness, convulsions, acute respiratory failure, bilirubin greater than 2.5 mg/dL, spontaneous bleeding, hypoglycaemia, metabolic acidosis, acute renal failure, haemoglobinuria, glycaemia 3 mg/dL, severe normocytic anaemia Hb 4%. Data collected: sex, age, origin country, prior consultation at the international vaccination centre and chemoprophylaxis against malaria, treatment with artesunate IV, initial parasitaemia (%), parasitaemia at 24 hours (%), parasitaemia at 48 hours (%), hospitalisation stay (days), adverse effects and readmission due to malaria recurrence. The data was obtained from the digital clinical history.

Results

SEX AND AGE	
Patients	32 // 29(90.6%) men
Average age	35.4years(18-48)

PARASITAEMIA	
Initial parasitaemia	2.65%
Patients presented parasitaemia after 24 hours of treatment	11(34.4%)
Patients presented parasitaemia after 48 hours of treatment	0

ORIGIN COUNTRY	
Mali	21(65.6%)
Senegal	5(15.6%)
Gambia	2(6.3%)
Equatorial Guinea	2(6.3%)
Ivory Coast	1(3.1%)
Ghana	1(3.1%)

INTERNATIONAL VACCINATION	
Patients who went to prior consultation in international vaccination	6(18.8%) but they didn't complete de chemoprophylaxis
Patients were treated with artesunate IV	5(15.6%)

ADVERSE EFFECTS	
Patients presented adverse effects	9 (28.1%)
Thrombocytopenia	5(55.6%)
Anemia	3(33.3%)
Headache	2(22.2%)
Dizziness	1(11.1%)

HOSPITAL STAY	
Average hospital stay in patients with severity criteria	4.2 days
Average hospital stay in patients without severity criteria	2.3 days

Conclusion

Artemisinin derivatives are highly effective. They were effective in 100% of cases. Adverse effects were not serious and reversed after treatment was completed. No resistances to treatment were found in any cases.