Cotrimoxazol to prevent malaria in HIV-infected pregnant women in Sub-Saharan Africa

Submission date	Recruitment status No longer recruiting	Prospectively registered		
27/08/2012		☐ Protocol		
Registration date 27/09/2012	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 13/09/2016	Condition category Infections and Infestations	Individual participant data		

Plain English summary of protocol

Background and study aims

Malaria is a tropical disease spread by mosquitoes. It affects up to 500 million people each year, killing 1-3 million, mostly pregnant women and children in sub-Saharan Africa. The HIV pandemic disproportionately affects sexually active women in Africa, who as a result are more vulnerable to malaria. Infection with both malaria and HIV during pregnancy leads to anaemia (decreased red blood cells), low birth weight, and increased risk of death. The WHO recommends intermittent preventive treatment (IPT) with the drugs sulphadoxine-pyrimethamine (SP) during pregnancy in areas with a high HIV prevalence. On the other hand, UNAIDS/UNICEF recommend daily treatment with the drugs trimethoprim-sulfamethoxazole (cotrimoxazole: CMX) for all HIV-positive pregnant women. Unfortunately, taking CMX and IPT with SP can cause dangerous side effects for pregnant women and infants, the risk of side-effects being higher in HIV-positive patients. CMX has been proven to protect children and HIV-positive adults against malaria, and CMX alone may be effective at preventing malaria during pregnancy. The aim of this study is to compare the effects of CMX with standard IPT on malaria risk in HIV-pregnant women in rural sub-Saharan Africa.

Who can participate?

HIV-positive pregnant women aged 15 to 45

What does the study involve?

Women are randomly allocated to be treated with either daily CMX or IPT with SP one dose per month until delivery. Women are followed up monthly and are asked to deliver in the study center. At delivery a sample of the placenta is collected. Babies are followed up until the age of 3 months. The number of malaria cases, pregnancy outcome and birth weights are measured in both groups.

What are the possible benefits and risks of participating?

All treatments and tests are free of charge. All pregnant women receive a mosquito net treated with insecticide. Treatment to prevent mother-to-child transmission of HIV follows the national and WHO guidelines. The main side effects of the study drugs are anaemia and skin allergy.

Where is the study run from?

Nineteen health centers participated in the study: CMS Noepe, Hôpital Assahoun, Hôpital Agou-Gare, Hôpital Agou Bethesda, CMS Kpogandji, CMS Kpadapé, CHP Kpalimé, Polyclinique Kpalimé, CMS Adéta, CMS Goudévé, Hôpital Danyi, Hôpital Notsè, Hôpital Anié, CMS Glei, CMS Agbonou, Polyclinique Atakpamé, Hôpital Atakpamé, CMS Akparè, CMS Témédja.

When is the study starting and how long is it expected to run for? January 2009 to August 2012

Who is funding the study? AlterSanté (France)

Who is the main contact? Dr Elise Klement eklement@altersante.org

Contact information

Type(s)

Scientific

Contact name

Dr Elise Klement

Contact details

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Additional identifiers

Protocol serial number

1

Study information

Scientific Title

Effectiveness of Trimethoprim-Sulfamethoxazole to prevent malaria in HIV-infected pregnant women in P. falciparum-endemic Sub-Saharan Africa: a randomized controlled trial

Study objectives

Cotrimoxazol is non inferior to standard intermittent preventive treatment (IPT) on malaria risk in Human immunodeficiency virus (HIV) pregnant women in rural sub-Saharan Africa.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Togolese National Ethic Committee, January 2009

Study design

Multicenter open-label non-inferiority randomized study

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Malaria HIV vertical transmission

Interventions

Women who volunteered were randomized to receive either daily 80/400mg trimethoprim-sulfamethoxazole (CMX) or intermittent preventive treatment (IPT) with 1000/50mg sulfadoxine-pyrimethamine (SP) as follows: first dose at inclusion day, then 1 dose per month until delivery. Women were followed monthly clinically and biologically (Hb and blood smear) free of charge, and were asked to deliver in the study center. At delivery a placenta sample was collected. Babies were followed until the age of 3 months.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Trimethoprim-sulfamethoxazole, sulfadoxine-pyrimethamine

Primary outcome(s)

Incidence of malaria during pregnancy, calculated as the number of malaria events per person year.

Key secondary outcome(s))

- 1. Blood parasitaemia in women and new-born
- 2. Treatment tolerance
- 3. Pregnancy outcome
- 4. Birth weight
- 5. Placental malarial infection

Completion date

31/08/2012

Eligibility

Key inclusion criteria

- 1. HIV1
- 2. Women <28 weeks of pregnancy
- 3. CD4 >200/mm3
- 4. Hb >7 g/L

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Female

Key exclusion criteria

- 1. Age<15
- 2. HIV2 or HIV1+2
- 3. Allergy or ongoing sulfamides treatment

Date of first enrolment

01/01/2009

Date of final enrolment

31/08/2012

Locations

Countries of recruitment

France

Togo

Study participating centre Centre Médical de Bligny

Briis-sous-forges France 91640

Sponsor information

Organisation

AlterSanté (France)

ROR

https://ror.org/03sfwdd85

Funder(s)

Funder type

Research organisation

Funder Name

AlterSanté (France)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details results	Date created Date added Peer reviewed? Patient-facing?			
Results article		01/03/2014		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes