Worms and human immunodeficiency virus (HIV) Interaction Study - Epidemiology component

Submission date Recruitment status Prospectively registered 03/07/2009 No longer recruiting [] Protocol Statistical analysis plan Registration date Overall study status 19/08/2009 Completed [] Results Individual participant data Last Edited Condition category Record updated in last year Infections and Infestations 19/08/2009

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Elmar Saathoff

Contact details

Leopoldstr. 5 Munich Germany 80802 +49 (0)89 2180 3830 elmarsaathoff@web.de

Additional identifiers

Protocol serial number

DFG protocol No.: SA 1878/1-1

Study information

Scientific Title

Intestinal helminth infections and schistosomiasis and their relation to human immunodeficiency virus-1 (HIV-1) incidence, disease progression and immunology in Mbeya Region, Tanzania - epidemiology component

Acronym

WHIS Epi

Study objectives

- 1. The incidence of human immunodeficiency virus-1 (HIV-1) infection in initially HIV negative participants is reduced after targeted treatment of helminth infections (after diagnosis) when compared to initially HIV negative participants who have neither been examined nor treated for helminth infections
- 2. HIV disease progression and the onset of acquired immune deficiency syndrome (AIDS) in HIV-1 positive participants is delayed after targeted treatment of helminth infections (after diagnosis) when compared to HIV positive participants who have neither been examined nor treated for helminth infections

Ethics approval required

Old ethics approval format

Ethics approval(s)

Local Institutional Review Board (IRB) in Munich (Ethikkommission der Medizinischen Fakultät der LMU Muenchen) approved on the 3rd April 2009.

Approval for collection of required data and to treat helminth infections:

- 1. National Institute of Medical Research (NIMR) Institutional Review Board (IRB), gained in 2005
- 2. Mbeya Medical Research and Ethics Committee, gained in 2006

Approval to use the obtained data for this study has been applied for with the two above local IRBs but is still pending.

Study design

Observational longitudinal study

Primary study design

Observational

Study type(s)

Screening

Health condition(s) or problem(s) studied

Human immunodeficiency virus-1 (HIV-1) infection/helminth infections

Interventions

This is an observational longitudinal study, implemented within the framework of a large, household based single-centre population-based cohort study (EMINI), which is conducted by the Mbeya Medical Research Programme in cooperation with Munich University.

EMINI cohort activities started in 2006 involving ~18500 participants of all ages and both sexes from 4283 households. Thus most potential WHIS_Epi participants have already been followed

up since then (exception: new household members). Since the start of EMINI, participating households have been visited annually, in order to collect lab samples and interview data regarding HIV, malaria, tuberculosis (Tb) and other infectious diseases from all consenting household members.

In August 2008, examination for intestinal nematode infection and schistosomiasis (using Kato-Katz faecal thick smears and urine filtration) and standard helminth treatment was introduced in parts of the EMINI population. In accordance with national Tanzanian (TZ) guidelines treatment is 400 mg albendazole for participants older than 3 years and 200 mg albendazole for participants younger than 3 years from households where intestinal nematode infections were found, and 40 mg praziquantel per kg for individual treatment of diagnosed schistosomiasis infection. Due to logistic and financial constraints we were initially only able to offer these services to only half of the participating households.

However, during the next round of follow-up starting 1st August 2009, all study participants will receive diagnosis for helminth infection and treatment if needed. The WHIS-Epi study will link data of previous helminth infection and respective treatment with data on HIV incidence and disease progression in both parts of the EMINI cohort.

Joint/scientific contact details: Dr Leonard Maboko Managing Director of MMRP Mbeya Medical Research Programme Mbeya Tanzania

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

- 1. Hypothesis 1: Seroconversion to HIV since last study visit; applied tests:
- 1.1. Initial HIV screening with SD Bioline HIV1/2
- 1.2. Positive results retested with Enzygnost HIV1/2 Plus
- 1.3. Discordant results confirmed by Western Blot
- 2. Hypothesis 2:
- 2.1. Change in Karnofsky score
- 2.2. HIV staging
- 2.3. Presence/absence of opportunistic infections (all determined by medical examination)
- 2.4. Changes in viral load

Assessed one and two years after deworming.

Key secondary outcome(s))

- 1. Prevalence of intestinal nematode infections and schistosomiasis in the study population, measured before worm treatment
- 2. Effect of albendazole and praziquantel treatment on helminth infection, measured one and two years after deworming
- 3. Helminth reinfection after deworming, measured one and two years after deworming

Intestinal nematode and S. mansoni infection for all above outcomes will be diagnosed by Kato-Katz microscopy, S. haematobium infection by urine filtration and microscopy.

Completion date

31/07/2011

Eligibility

Key inclusion criteria

Participation in the EMINI cohort study. Participants of all age groups and both sexes will be included.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Other

Sex

All

Key exclusion criteria

The study will only include consenting members of households who participate in the EMINI study, no other exclusion criteria apply.

Date of first enrolment

01/08/2009

Date of final enrolment

31/07/2011

Locations

Countries of recruitment

Germany

Tanzania

Study participating centre Leopoldstr. 5

Munich Germany 80802

Sponsor information

Organisation

Department for Infection and Tropical medicine (Abteilung fuer Infektions- und Tropenmedizin) (Germany)

ROR

https://ror.org/05591te55

Funder(s)

Funder type

Research council

Funder Name

German Research Council (Deutsche Forschungsgemeinschaft [DFG]) (Germany) (ref: SA 1878/1-1)

Funder Name

European Commission (Belgium) - DGVIII AIDCO (donor of EMINI) (ref: SANTE/2006/129-931)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet Participant information sheet 11/11/2025 No Yes