

FEMALE GENITAL SCHISTOSOMIASIS AND HUMAN PAPILLOMAVIRUS IN RURAL MADAGASCAR: A LONGITUDINAL STUDY TO ASSESS PROGRESSION AND RESOLUTION OF THE DISEASES

Authors:

Valentina Marchese^{1,2}, Jean-Marc Kutz^{1,2}, Pia Rausche^{1,2}, Tahinamandranto Rasamoelina³, Sonya Ratefiarisoa⁴, Ravo Razafindrakoto³, Philipp Klein^{1,2}, Anna Jaeger^{1,2}, Rivo Solotiana Rakotomalala⁴, Zoly Rakotomalala⁴, Bodo Sahondra Randrianasolo⁵, Sandrine McKay-Chopin⁶, Jürgen May^{1,2,7}, Raphael Rakotozandrindrainy⁸, Dewi Ismajani Puradiredja¹, Elisa Sicuri⁹, Monika Hampl¹⁰, Irina Kislaya^{1,2}, Eva Lorenz^{1,2}, Tarik Gheit⁶, Rivo Andry Rakotoarivelo¹¹, Daniela Fusco^{1,2}

1: Department of Infectious Disease Epidemiology, Bernhard-Nocht Institute for Tropical Medicine (BNITM), Hamburg, Germany.

2: German Center for Infection Research (DZIF), Hamburg-Borstel-Lübeck-Riems, Germany.

3: Centre Infectiologie Charles Mérieux (CICM), Antananarivo, Madagascar.

4: Centre Hospitalier Universitaire (CHU) Androva, Mahajanga, Madagascar.

5: Association K'OLO VANONA, Antananarivo, Madagascar.

6: International Agency for Research on Cancer (IARC), Lyon, France.

7: University Medical Center Hamburg-Eppendorf (UKE), Hamburg, Germany.

8: University of Antananarivo, Antananarivo, Madagascar.

9: Barcelona Institute for Global Health (IS Global), Barcelona, Spain.

10: Köln-Hohenlind Hospital, Cologne, Germany.

11: University of Fianarantsoa, Fianarantsoa, Madagascar.

Background:

Schistosomiasis is highly endemic in Madagascar. Female genital schistosomiasis (FGS) is the chronic manifestation of *Schistosoma haematobium* infection. Complications include infertility, ectopic pregnancy and increased risk of HIV acquisition, while the association with HPV infection is still unclear. The objective of this study is to estimate the baseline prevalence of FGS and HPV and to assess possible factors associated with lesion resolution after praziquantel treatment so as HPV clearance dynamics in presence of FGS.

Methods:

The study started in 2021 in three Primary Health Care Centers (PHCCs) in Maravoay district. Women of reproductive age were invited to participate through community outreach activities. FGS was diagnosed using colposcopy (CLP). CLP images were reviewed by two specialists through a double-blinded review. A Luminex bead-based assay was performed on cervical vaginal lavages (CVL) for HPV testing. Crude (CPR) and adjusted prevalence ratios (APR) of associations between selected factors and FGS and HPV positivity were estimated. Annual reassessment with CLP and CVL collection is being offered for a maximum of four years to all women enrolled in 2021.

Results:

To date, 1053 women underwent CLP and CVL at least once, 508 twice and 93 three times. Among 500 women enrolled in 2021, 302 had complete information on FGS and HPV diagnosis: FGS prevalence was 62.6% (189, 95% CI: 56.9-68.1), HPV prevalence 42.7% (129 women, 95% CI: 37.1-48.5 of which 106- 82.0%- with high-risk infection), and FGS/HPV prevalence was 26.5% (80, 95% CI: 21.6-31.8). No association was observed between FGS and HPV positivity. The analysis of CLP images and CVLs collected in 2022 and 2023 is ongoing.

Conclusion:

Both diseases had high baseline prevalence, supporting the need for targeted interventions and the benefit of colposcopy in PHCCs. The analysis of the longitudinal data will contribute to clarify the dynamics of coinfection providing information for the clinical management.

Disclosure of Interest Statement:

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. Where authors are identified as personnel of the International Agency for Research on Cancer/World Health Organization, the authors alone are responsible for the views expressed in this article and they do not necessarily represent the decisions, policy, or views of the International Agency for Research on Cancer/World Health Organization.

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