

22 APRILE, VENERDÌ

11:00 - 12:30

SALA A

CENTRO CONGRESSI PARTENOPE

MED-1

RESEARCH AND MEDICINE IN AFRICA - CHALLENGES AND OPPORTUNITIES

Pasquale Maffia, University of Glasgow, Università di Napoli Federico II

Challenges and Opportunities of big data and clinical research in Africa

Mayowa Ojo Owolabi, University of Ibadan, Nigeria

Heart failure in Africa

Ntobeko Ntusi, University of Cape Town, Sudafrica

Continuing with Clinical Research Work during the Pandemic: The Malawi Story

Wilson Mandala Oda, Malawi University of Science and Technology

The story of Blantyre - Blantyre Project - Developing a research Laboratory in Malawi

Paul Garside, University of Glasgow, UK

Malaria infection is not associated with development of hypertension in the short-term in young Malawian adults

E. Caiazzo, Dipartimento di Farmacia, Università di Napoli Federico II, Centre for Immunobiology, Institute of Infection, Immunity and Inflammation, College of Medical, Veterinary and Life Sciences, University of Glasgow; W. Mandala, Academy of Medical Sciences, Malawi University of Science and Technology; I.Sulani, M. Soko, G. Wairimu, Malawi-Liverpool Wellcome (MLW) Trust Clinical Research Programme; A. Ialenti, Dipartimento di Farmacia, Università di Napoli Federico II; P. Garside, Centre for Immunobiology, Institute of Infection, Immunity and Inflammation, College of Medical, Veterinary and Life Sciences, University of Glasgow; T.J.Guzik, Institute of Cardiovascular and Medical Sciences, College of Medical, Veterinary and Life Sciences, University of Glasgow, Department of Internal Medicine, Jagiellonian University, Collegium Medicum; K.B.Seydel, Malawi-Liverpool Wellcome (MLW) Trust Clinical Research Program, Department of Osteopathic Medical Specialties, College of

Osteopathic Medicine, Michigan State University; P.Maffia, Centre for Immunobiology, Institute of Infection, Immunity and Inflammation, College of Medical, Veterinary and Life Sciences, University of Glasgow, Dipartimento di Farmacia, Università di Napoli Federico II

GULU-NAP a successful challenge

Luigi Greco, Università di Napoli Federico II

ABSTRACT

MALARIA INFECTION IS NOT ASSOCIATED WITH DEVELOPMENT OF HYPERTENSION IN THE SHORT-TERM IN YOUNG MALAWIAN ADULT

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Hypertension is a major cause for cardiovascular and renal diseases and mortality worldwide. Prevalence of hypertension is high in the areas with endemic malaria, such as sub-Saharan Africa (SSA) causing it to become a healthcare priority. Therefore, it has been hypothesized a potential association between malaria infection and hypertension but to date, there is not sufficient clinical evidence to support his hypothesis. The main objective of our study was to establish the short-term effects of malaria infection on blood pressure and hypertension development in Malawian adults. A total of 118 patients from Malawi with a median age of 26 years (59% female) were enrolled in this case-control observational study: 77 patients that did not have current malaria and have not had malaria in the past six months (healthy controls) and 44 patients with uncomplicated malaria (malaria cases) from within the same geographic location for comparison. Pregnant patients and those with HIV were excluded from the study. Participants were followed for 6 months, taking blood

pressure(BP)readings (office BPdetermination, at recruitment and at1, 3, and 6 months) and collecting venous blood samples at three time points (at recruitment, 1 and 6 months).At recruitment, malaria cases presented all symptoms and signs consistent with malaria disease according to the World Health Organization (WHO) guidelines,as well as the common hematological abnormalities observed in malaria infection including lower blood platelet, lymphocytes and eosinophils counts,increased monocyte and neutrophil counts,and higher mean corpuscular hemoglobin concentration (MHCH) compared to healthy controls with no difference at 1 and 6 months of follow-up.Importantly, we did not find any difference in both systolic and diastolic blood pressure at recruitment and at1,3 and 6 months of follow-up between healthy controls and malaria cases.Therefore, our results suggest that young Malawian adults infected with malaria are not more susceptible to develop hypertension in the short-term.Further investigations,including larger studies and a long-term approach are necessary to fully elucidate the potential correlation between malaria infection and hypertension in the longer term and in at-risk populations.