Malaria chemosuppression in pregnancy. V. Placenta malarial changes among three different prophylaxis groups.

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Abstract

The effect of malaria chemoprophylaxis during pregnancy on placenta malarial changes (PMCs) was investigated in 170 tissue sections. Women of 63 sections received daily proguanil (PROG), 61 once weekly chloroquine (CQ) and 46 the two drug combination (CQ+PROG). All were residents of a malaria hyperendemic area in Muheza District, Tanzania. Supervised prophylaxis started early in pregnancy till delivery. Parasitaemias and clinical episodes were detected early and radically treated. Overall, PMCs were mostly infrequent and light viz: fibrinous deposits (98%), fibrinoid necrosis (60%), leucocytic infiltrations (59%), macrophage containing pigment (16%), and malaria parasites (8%). The type, prevalence, and severity of the PMCs in the three prophylaxis groups were comparable. This was despite the fact that PROG and CQ+PROG were prophylactically more efficacious than CQ and despite the expectation that the prevalence and severity of the PMCs would be high in the CQ group. Prompt diagnosis and effective treatment of parasitaemias in this group contributed to the low prevalence and less severity. It is concluded that effective malaria chemoprophylaxis or prompt diagnosis and effective treatment of malaria parasitaemias have significant impact on the prevalence of PMCs. Due to various operational constraints in most developing countries; chemoprophylaxis remains the only feasible broad option for malaria control in pregnancy.