NEW DIAGNOSTIC METHODS IN MALARIA DETECTION

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ABSTRACT

INTRODUCTION: Clinical and laboratory diagnosis of malaria poses a major challenge in endemic areas with low parasitemia, in moving populations spreading infection and among travellers. Routine smears has made way to NEW METHODS for early, prompt and accurate detection of malaria.

METHODS: The alternative method for Giemsa microscopy is Florescent assisted microscopy which is faster and easier. The rapid detection tests in card/ cassette forms are dependable since the malarial antigen/ enzymes are indentied. The molecular methods like PCR, FISH, LAMP detect the malaria proteins/ nucleic acids, are extremely sensitive specific and can be used even in field setting with the simpler versions of the processing units. The newer methods are optical speckle imaging of infected red cells and tests based on the malaria biomarker, haemozoin which has the property of depolarising laser light, inducing magnetic rotation and forming vapor nanobubbles.

CONCLUSION: Use of new malaria detection methods must be encouraged after validation for control and eradication of malaria.