

IMMUNOCHROMATOGRAPHIC TEST (ICT) IN THE DIAGNOSIS OF FALCIPARUM MALARIA

Hossain R¹

Malaria is the most important parasitic infection in people accounting for significant human catastrophe. Each year there are more than 250 million cases of malaria¹, killing around 781,000 people each year according to World Health Organization's (WHO) 2010 World Malaria report². It makes third among major infectious diseases with a mortality rate lower only than pneumococcal respiratory infections and tuberculosis³. Malaria is commonly associated with poverty and can indeed be cause of poverty and major hindrance to economic development.

Malaria is an important public health problem in Bangladesh with significant morbidity and mortality. More than 95% of malaria cases in Bangladesh are reported from 13 highly endemic districts, where 11 million people are at risk⁴.

An early and accurate diagnostic approach is essential for a reduction of the morbidity and mortality of malaria. Considered as the gold standard, microscopic examination of Giemsa-stain blood films is widely used because of its efficiency and low cost. However, the microscopic technique is time-consuming and requires equipment and trained personnel⁵. Immunochromatographic tests (ICT) render the non-microscopic methods for malaria diagnosis, thereby saving on training and time. These tests are easy to perform and require little training to interpret results⁶. Immunochromatographic rapid tests offer the possibility of more rapid non-microscopic method for rapid diagnosis^{7,8}. Considering the limitations in the rural areas rapid diagnostic tests (RDTs) are very useful.

Harani SM et al evaluated the sensitivity and specificity of ICT malaria Pf/Pv using microscopy as gold standard diagnosis in Pakistan. They found that for *P falciparum* the ICT was 97.0% sensitive and 98.3% specific, with positive predictive value (PPV) of 78.0% and negative predictive value (NPV) of 99.8%⁷. In this issue of journal the study of "Immunochromatographic Test over Microscopy in Diagnosis of Severe Malaria in Bangladesh" by Awwal A et al has shown that sensitivity and specificity of Immunochromatographic Pracheck Pf test were 91.42% and 90.65% respectively. At the same time study of "Immunochromatographic Test (ICT

Malaria Pf) in diagnosis of Falciparum Malaria' by Uddin MM et al has revealed that "ICT Malaria Pf" had sensitivity and specificity respectively 94.2% and 100%. Both the studies found that Immunochromatographic rapid diagnostic tests were reliable.

Reducing the impact of malaria is key to the achievement of the Millennium Development Goals, agreed by every United Nations Member State. The theme of fourth World Malaria Day (15 April 2011) - Achieving Progress and Impact - heralds the international community's renewed efforts towards zero malaria deaths by 2015. In achieving the global goal, Rapid diagnostic test can play its role.

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1. Maj Gen Rabiul Hossain MBBS, FCPS, FRCP, Consultant Physician General, Bangladesh Armed Forces.