Introduction
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Among all infectious diseases, Malaria continues to be one of the biggest contributors to disease burden in terms of death and suffering.

It is the most important of parasitic disease of human with transmission in 100 countries worldwide affecting more than one billion people (WHO 2000). According to WHO more than 40% of world’s population are exposed to risk of malaria (WHO 1993). The incidence of malaria worldwide is estimated to be 300-500 million clinical cases each year.

Inspite of extensive progress in Medical science in later half of the last century, Malaria continues to be a major killer of man especially in tropical countries (Misra NP, 1996).

Malaria is thought to kill between 1.1 – 2.7 million people worldwide each year, of which about one million are children under the age of five years. In other words malaria kill one child every 30 seconds (WHO 2000).

Wide variability in its clinical presentation poses great difficulties in clinical diagnosis and management of patients with malaria. Most important feature of new WHO global malaria control strategy is rapid diagnosis of malaria, so that effective treatment can be given quickly to reduce morbidity and mortality (WHO 1992).

In 1881 Laveron discovered malarial parasite in blood smear of a dying patient. Since then demonstrating parasites in the blood smear has remained a Gold standard for malarial diagnosis. Both
thick and thin film examinations are essential, thick for parasite detection and thin for species identification. In clinical situation many a times for various technical and scientific reasons blood film could falsely be negative. This problem is particularly marked with plasmodium falciparum (Ashok S.K 2002).

The reliability and cost effectiveness of light microscopy is questionable (Payne 1988 WHO 1988). It is rather lengthy, needs trained personnel and maintenance costs. So need of cost effective technique is crucial for the implementation of global strategy for malaria control (WHO 1993).

Various new methods are tried to improve parasitic diagnosis like Quantitative Buffy Coat (QBC) method (Rickman et al, 1989) and Fluorochrome technique (Kawamoto 1991). DNA probes have been developed for diagnosis but they are time consuming, expensive and have low sensitivity.

Polymerase Chain Reaction (Pieroni P Mills et al, 1998) has also been successfully used in the diagnosis of malaria but has not been adapted for routine use in malaria control programme. However, sensitivity of PCR assay is very high which can detect even one parasite per ml of blood.

QBC have advantage of being rapid (taking only 10 minutes) have sensitivity and specificity slightly more than routine microscopy. This test offers ease in terms of staining and interpretation. However, differentiation of species and stage is harder (Wardlow SC et al, 1983) (WHO 1988).

The QBC technique is found to be a rapid technique with a sensitivity of 83% and specificity of 94%. This technique can detect 3 – 4 parasites / ml of blood and malaria species identification was
also possible. However, quantification of parasitemia could not be made by this technique (Bijay R et al, 1998).

Parasight F test Dipstick test is highly specific and more sensitive than routine microscopy for plasmodium falciparum, and this is based on detection of circulating histidine rich protein 2 (HRP 2) by capture assay (Beadle et al 1994, CJ Shiff et al 1994, Mills CD et al 1999, Kaushik Anil et al 2000). This test cannot detect plasmodium vivax species hence in area with mixed infection and infection with plasmodium vivax it has limited value.

In India about 70% of the malarial infection are reported to be due to plasmodium vivax, 25 - 30% due to plasmodium falciparum and 4 –8 % due to mixed infection. Plasmodium malariae has a restricted distribution and is said to be responsible for less than 1% of malarial infection in India. Plasmodium ovale is very rare parasite of man, mostly confined to tropical Africa (Dhir. SL et al 1969).

The need of a rapid test which could detect both plasmodium falciparum and plasmodium vivax, and has sensitivity and specificity better than other methods of diagnosis has been fulfilled by a rapid whole blood immunochromatographic test (ICT) for detection of plasmodium falciparum and plasmodium vivax has been developed which is very sensitive and specific (Gatti.S et al 2001, Tarimo DS et al 2001, Mason DP et al 2002).

Histidine rich protein 2 (HRP 2) test has potential application in detection of chloroquine / quinine resistant malarial infection, since re-infection with sensitive strain is unlikely upto 14th day after treatment (Nharakurva S et al).

This test uses two antibodies, one antibody is specific for histidine rich protein 2 (HRP 2) antigen of plasmodium falciparum
and other antibody is specific for a malarial antigen (panmalaria antigen) which is common to both plasmodium falciparum and plasmodium vivax species.

The sensitivity and specificity of the immunochromatographic test for plasmodium falciparum and plasmodium vivax will be compared with light microscopy in the study.