QBC™ MALARIA TEST and QBC™ PARALENS

5-110 Ul of blood is taken in a QBC™ tube coated with acridine orange, (AO- fluorescent dye) and centrifuged for 5 minutes. The QBC tube when viewed under PARALENS®-Product of QBC Diagnostics, Inc. U.S.A. (fluorescence microscope), the Malaria parasites are seen concentrated in the area below the buffy coat, shining like bright stars in the background of Dark Red Blood Cells.

Sensitivity

The high volume of blood, the concentration of the parasites by centrifugation, the fluorescent staining of parasites, make this QBC MALARIA TEST the most ever sensitive test available for the diagnosis of Malaria. Unparalleled sensitivity, of one parasite in 2 Ul, by QBC-M.P. TEST is possible, as against 40 to 50 Parasites per Ul for Thick film. The loss of parasites upto 40% occurs in conventional method, whereas no loss of parasites in the processing of QBC Tube. Upto 18 per cent more positives are reported by QBC than conventional Thick Film method.

Diagnosis

All stages of the Plasmodium species are identified in QBC. Species differentiation is possible, enabling the physician to administer the right type of medication. Because of the high sensitivity of QBC-M.P TEST, when Malaria strikes first, it is possible to detect early, and after medication the patient gets back to normalcy fast, which avoids loss of working days for the patient. A QBC test is highly specific and a negative result will enable to treat the patient by avoiding a multi drug therapy.

It is needless to say QBC Malaria Test is far superior to the RAPID CARD DETECTION FOR MALARIA, since all the studies done claim levels of sensitivity / specificity which is less than that of THICK FILM, which itself is lesser sensitive than QBC MALARIA TEST.

The test: M.P-QBC or QBC MALARIA. Blood required: One ml EDTA blood. (For emergencies, the results can be reported in 15 minutes)

PARALENS:

A MINIATURE Fluorescent Microscope, other than use for QBC MALARIA TEST can also be used for "FLUORESCENT TEST FOR ACID FAST BACILLI (AFB) MYCOBACTERIUM TUBERCULOSIS" by using AUROMINE - Fluorescent Staining technique.

Specific uses of QBC Centrifugal Haematology & Blood Parasite Detection System

Faster and more accurate detection of malarial parasite in capillary and venous blood. Species identification is easy, fast and accurate.Detection of filaria in blood.In addition to its unique feature for detection of malaria and filaria, this system converts any laboratory conventional microscope into a lower-cost fluorescent microscope. The QBC Paralens (affordable fluorescent attachment) can perform a greater variety of tests, including chlamydia, ANA, PCP, CMV, etc. Acid-fast bacilli in sputum, urine, CSF using auromine 'O', rodamine 'B' stain.Quick and accurate blood cell count with two-part differential count. Machine gives very accurate platelet count for monitoring dengue patients. The QBC centrifugal haematology system consists of computerised version of Dr Maxwell Wintrobe’s Clinical Haematology (eighth edition) and provides a haematology diagnostics reminder. Haematology diagnostics reminder is clinical interpretation of the results obtained on the haematology reader. Haematology reader is sturdy, with no liquid handling or moving parts. Machine is easily movable and can be carried from one place to another. (Could be used for field study). No daily cleaning necessary. Ease and simplicity of operation means any laboratory staffer can operate the system.

Paralens assembly:

This is a microscope adapter that is a cost-effective alternative to fluorescent microscopes. The paralens UV microscope adapter is a blue-violet light module which provides fibre-optic illumination with an AC outlet that can be attached to any conventional microscope. The paraviewer microscope tube holder is a specially-designed QBC tube reviewing block that accepts standard microscope oil. The paralens assembly consists of focusing lens 470 - 490 nm wavelength excitation filter, dichroic beam splitter, 1.0 NA 60 x oil immersion lens, 520 nm wavelength barrier filter and standard royal microscopic society threading.

Focusing lens: Passes white light from illuminator to the excitation filter. Excitation filter: Passes light in the 470 -
490 nm wavelength while eliminating other wavelengths for optimum fluorescence. Dichroic beam splitter: Reflects excitation radiation downward with high efficiency. Fluorescence emitted from the specimen is almost entirely transmitted upward.

60x oil immersion lens: Provides residual radiation, assures that only safe, visible fluorescence reached the eyes of the microscope operator. Standard royal microscopic society threading: Assures adaptability to all microscopes.