Review Article

An Overview of theLaboratory Diagnostic Procedures of Visceral Leishmaniasis (Kala-Azar)

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Abstract

Visceral leishmaniasis (Kala-azar) is a systemic infection disease that can be diagnosed by some invasive procedures such as splenic, liver biopsy or bone marrow aspiration, whichare determined as the gold standards for diagnosing of this disease. At present, a variety of noninvasive tests having different specificities and sensitivities are available for the diagnosis of visceral leishmaniasis. Direct agglutination test (DAT) can be an appropriate and applicable method provided that proper antigens are prepared. The rapid rK39 strip test (for detection of antigen) can be used for diagnosis of visceral leishmaniasis (VL), which is suitable for acute forms of disease in the field. Other tests, such as rapid KATEX strip test (for detection of antigen) and polymerase chain reaction (PCR), which are recently recommended for diagnosis and prognosis of visceral leishmaniasis, are the simple, inexpensive and easily available under field conditions.This review article focuses on different, novel and current procedures for the diagnosis of visceral leishmaniasis.

Key words: Laboratory diagnosis,visceralleishmaniasis, Kala-azar,rk39, Katex, PCR

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