

Results of current study indicate that parasitic protozoa still a real threat to public health in Iraq. The current study spotlight the diagnosis of infection in hospitalization Wasit governorate by using routine parasitic laboratory tests and radiological examinations. Out of 3350, 1780 (98.18%) and **33 (1.82%)** were infected with *Entamoeba histolytica* and *Leishmania donovani*, with overall prevalence was 65.33% for both pathogenic protozoa. The CT scan and ultrasonography in Amoebiasis revealed hepato-splenomegaly 96.66%, Amebic liver abscess 2.35%, pleural effusion and Peri-hepatic fluid collection 0.54% and 0.45% respectively. Whereas in Leshmaniasis included Hepatosplenomegaly 48.5%, Ascites 24.2%, Lymphadenopathy 15.2%, multiple nodular lesions in the liver and spleen 6.1% and shrinkage liver 3.0%. **A high** number of cases in a region of present study were closely associated with an unusually distribution of a reservoir for human parasitic disease, in addition attributed to lower socioeconomic status and lack of health education. But a ray of hope in the time as the health education is the key changing the attitude of the public is a particular and important for disabling these. **In conclusion, we recommended widely using simultaneously radiological test with other criteria for more accuracy diagnosis.**