Diagnosis of intestinal tuberculosis by tissue Xpert MTB/Rif in an HIV-1 patient: Report of a unique case

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Introduction: HIV has changed the epidemiology of tuberculosis and is now considered the main risk factor for extra-pulmonary involvement. In recent years, molecular techniques have emerged as promising diagnostic tools. Only Xpert MTB/Rif assay has been advocated by the WHO for diagnosis of extra-pulmonary TB. Scarce data is available on its utility in gastrointestinal tuberculosis. We report a case of an HIV patient with intestinal tuberculosis diagnosed by XpertMTB/Rif.

Description: A 31 year-old HIV patient presented with diarrhea, fever, diffuse abdominal pain and weight loss for the last month. Bilateral crackles and right lower quadrant pain were found on physical exam. His CD4 count was 172 cells per ml and his HIV-1 viral load was 2026 copies/ml. Bilateral alveolar infiltrates were seen on the chest X-ray. Ultrasound showed enlarged peritoneal lymph nodes and thickening of the ileocecal region. Smear and Xpert MTB/Rif from sputum were negative. Patient underwent a colonoscopy which showed irregular congested ulcers in ileum, sigmoid and rectum. Xpert MTB/Rif from biopsy was positive for TB. Standard 4 drug therapy was started and patient improved significantly.

Discussion: The majority of experience with Xpert MTB/Rif has been on sputum samples, but it has also been used in a variety of fluid and tissue samples. It has a sensitivity of 89% and specificity of 74% for the diagnosis of extra-pulmonary tuberculosis. To our knowledge, there are no reports on the use of Xpert MTB/Rif in intestinal biopsies. Our case is a precedent for the use of this assay in the future.

Biography
Jose Gonzales Zamora has obtained his MD degree at Universidad Nacional Federico Villarreal in Lima, Peru. He has completed his Internal Medicine Residency at John H. Stroger Hospital and Infectious Disease Fellowship at Rush University Medical Center in Chicago, Illinois, USA. He is currently an Assistant Professor of the Infectious Disease Division at Augusta University in Augusta, Georgia, USA.

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