

IBD IN LMICS

that includes immunological, molecular, endoscopic, radiological, histopathological, and microbiological assessments, which are needed to improve diagnostic accuracy. Nevertheless, there is no single test that can clearly differentiate between GITB and CD.

The sensitivity and specificity of the tuberculin skin test [TST] for GITB diagnosis is only 64.7% [95% CI: 46.5–80.2%] and 73.3% [95% CI: 54.1–87.7%], respectively; the positive predictive value [PPV] is 73.3% [95% CI: 59.1–83.9%] and the negative predictive value [NPV] is 64.71% [95% CI: 52.6–75.2%].

Moreover, false-positive TST reactions can occur due to previous BCG vaccinations or other non-tubercular mycobacterial infections, and false-negative tests can be seen after immunosuppressive therapy.(186)

Although interferon-gamma release assays [IGRA] are relatively more specific for *Mycobacterium tuberculosis*, these are not always available in LMICs. A systematic review with a meta-analysis of IGRA accuracy showed that the mean sensitivity, specificity, PPV, and NPV in the eight studies reviewed were 81%, 85%, 78%, and 87%, respectively. In areas with a high TB incidence where latent infection is widespread, a positive QuantiFERON test result does not distinguish between active and latent TB. A retrospective study from China attempted to differentiate between GITB and CD based on the cutoff value of TB-IGRA. This study revealed that a TB-IGRA level > 100 pg/ml had a sensitivity of 88% and specificity of 74% for diagnosing GITB, and those with TB-IGRA level > 400 pg/ml had a more severe form of GITB.(187) However, this test is still necessary to exclude latent TB in IBD in TB-endemic regions, as evidenced by a high NPV [94.2%].(188)

PCR analysis may help differentiate TB from CD by detecting *M. tuberculosis* DNA in biopsy or stool specimens. A systematic review and meta-analysis sought to determine the diagnostic accuracy of Xpert® MTB/RIF and revealed that it has modest sensitivity and reasonable specificity for diagnosing GITB.(189) Multiple attempts have been made to combine various features in models for distinguishing GITB and CD. In a landmark study by Limsrivilai *et al.*, the investigators used a Bayesian model that demonstrated that the combination of gender, specific clinical manifestations, endoscopic features, and laboratory findings can accurately diagnose GITB in 91.8% of patients, with a sensitivity of 90.9% and a specificity of 92.6% for diagnosing GITB.(190)

Finally, in TB-endemic regions where there is diagnostic uncertainty between GITB and CD [after colonoscopy, histology, and microbiology], a diagnostic trial of ATT should be considered, as treating GITB misdiagnosed as CD with immunosuppression may be detrimental.(185, 191) In these cases, mucosal healing should be assessed after 2 months of ATT, as lack of mucosal healing could suggest an