



## Editorial

# Editorial: Differentiating Gastrointestinal Tuberculosis and Crohn's Disease—Antitubercular Therapy, Corticosteroids or Both

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Discriminating Crohn's disease (CD) from gastrointestinal tuberculosis (GITB) is a major challenge in TB endemic regions. Not only do these chronic granulomatous diseases share overlapping clinical, endoscopic, and imaging findings, the histopathological features are also similar.<sup>1</sup> The diagnosis is often unclear even after exhausting all available diagnostic modalities including histology and microbiological evaluation. Therefore, misdiagnosis is expected and does happen in a subset of patients even after extensive evaluation.<sup>2</sup> The clinical decision making in such patients where the diagnosis is unclear (after histopathological and microbiological tests including tissue culture and polymerase chain reaction-based tests) is fraught with risks.

The standard approach in TB endemic regions has been the use of a trial of antitubercular therapy (ATT), except in few patients who warrant a surgical intervention (►Fig. 1).<sup>3</sup> This approach has its benefits: an ATT trial with clear objective end-points in the form of an endoscopic mucosal response, a limited duration of therapy before assessing response, and lack of exacerbation of underlying CD in cases of misdiagnosis (►Fig. 1). However, there are some risks including adverse effects from ATT including drug-induced liver injury. Some studies have also suggested that a delay in diagnosis due to prolonged ATT may increase the risk of stricturing complications and potentially increase the need for surgical intervention.<sup>4,5</sup> However, multiple reports suggest that mucosal response (healing of ulcers) is detectable as early as after 2 months of ATT. Therefore, the delay in the detection and treatment of CD is avoidable by repeating an ileocolonoscopy at

2 months in all such patients irrespective of presence or absence of clinical response.<sup>6,7</sup>

In the current issue of the *Journal of Gastrointestinal Infections*, Panigrahi and Kumar report their brief experience with a radically different approach of treating with corticosteroids first in cases with a diagnostic dilemma. In three patients, all of whom eventually turned out to have TB, steroids were administered. The results are glaring: all three had worsening symptoms and at least one patient had dissemination of the disease. The authors also reported an increased microbiological positivity that helped clinch the diagnosis.<sup>8</sup>

In a retrospective study from Japan, 10 cases of ITB were misdiagnosed as CD. Of these, one patient died of respiratory failure and two patients needed an intestinal resection because of ileus.<sup>9</sup> In a literature review of the 22 patients who were misdiagnosed to have CD (but actually had GITB), 12 received steroids and half of these required surgical intervention.<sup>10</sup>

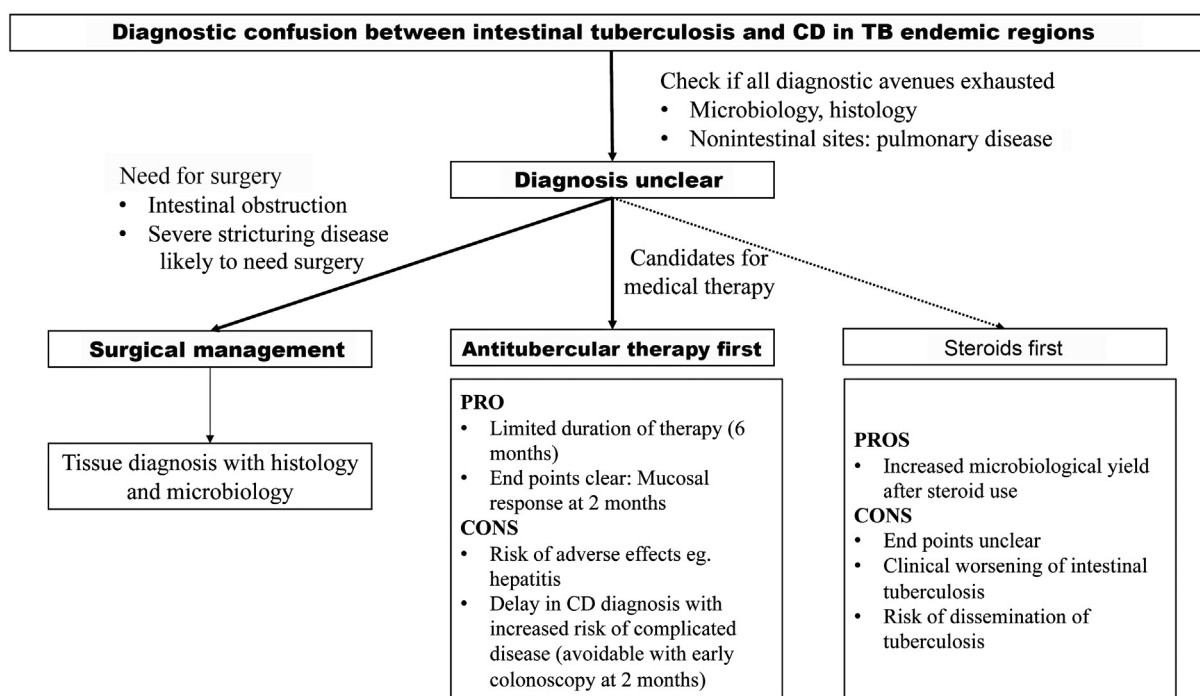
Given the promise "*primum non nocere*" which we make to our patients, one wonders if steroids-first is an appropriate approach. The potential risk of flare up of underlying ITB or dissemination to sites like the nervous system would be significant risks, and therefore we would argue against steroids-first as a therapeutic approach in the cases with a diagnostic confusion. Another potential option of prescribing a combination of steroids and ATT together should also not be used unless in the setting of a clinical trial. Such an approach runs the risk of not securing the diagnosis and also lack of clarity on follow-up and stopping rules. The potential risks with ATT-first approach are also real but likely to be less frequent and less likely to endanger life. Even as the

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**Fig. 1** Suggested therapeutic approach in patients with a diagnosis confusion between intestinal tuberculosis and Crohn's disease (CD) in tuberculosis (TB) endemic regions.

researchers continue to search for the “holy grail” to distinguish intestinal TB and CD, ATT first appears to be a more logical approach in regions endemic for TB.

#### Ethical Statement

Not applicable.

#### Author Contributions

K.K.: Literature review, initial draft and approval; V.S.: revision and final approval.

#### Data Availability Statement

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#### Conflict of interest

None declared.

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