

Anti-Mycobacterial Treatment: An Option for Refractory Inflammatory Bowel Disease?

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ABSTRACT

We hereby bringout three patients with activation of latent TB under anti TNF treatment.

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LETTER TO THE EDITOR

We hereby bring out three patients with inflammatory bowel disease (IBD) who developed tuberculosis (TB) after the start of anti tumor necrosis factor alpha (anti-TNF α) in spite of negative TB screening. Screening and treatment of latent TB infection (LTBI) in inflammatory bowel disease patients considered for anti tumor

necrosis factor alpha (anti-TNF α) treatment are problematic due to the lack of a gold standart diagnostic technique for LTBI. Turkey is among the countries with intermediate TB incidence. According to our national guidelines revised in 2005, patients with a history of untreated or partially treated TB or exposure to an active case of TB, with a tuberculin skin test (TST) ≥ 5 mm or fibrotic lesions on postero-anterior chest radiography (CXR) are indicated for prophylaxis. Booster TST is recommended for patients with anergic and even negative TST results. Bacille Calmette Guerin (BCG) vaccination is in our national schedule hence Interferon Gamma Release Assay (IGRA) test is also performed prior to the anti-TNF α treatment.

In contrary to the patients presented by Debeuckelaere^[1], our three patients who developed TB did not have reactivation of IBD throughout the whole anti TB treatment period although anti-TNF α was their third line treatment and their IBD course was severe from the beginning. However they relapsed after the cessation of the antibiotics.

A current meta-analysis of genome-wide association studies (GWAS), including more than 75,000 patients and controls, demonstrated a considerable overlap between susceptibility loci for IBD and mycobacterial infection^[2]. Human studies and animal models have demonstrated that Intestinal bacteria may play a key role in IBD^[3,4] and antibiotic treatment can reduce activity of IBD.

Granulomas are the aggregates of the immune cells, predominantly macrophages which are the cells of the innate immunity system and granulomas form when the agent can not be killed but captured. This fact brings the question if Crohn's disease (CD) is initiated by an infectious agent especially mycobacterium with a simultaneous defect in the innate immunity. Olsen et al assesed the frequency of mycobacteria reactive T cells in intestinal biopsies from patients with IBD^[5]. Their finding of high frequencies of mycobacteria reactive T cells present particularly in CD patients seems to be reasonable for anti-mycobacterial therapy together with immunosuppressive drugs.

Our three patients benefiting from anti-TB treatment for the maintenance of IBD remission give the idea that anti-mycobacteria

treatment might be an option for a subgroup of IBD patients conceivably living in regions with high TB burden or with genetic susceptibility for mycobacterial infection.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interests and received no financial support.

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