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# **Abdominal Tuberculosis**

I read with interest the article by Tulczynska et al on abdominal tuberculosis: an unusual cause of abdominal pain. I have a few queries regarding the management of that patient.

The Directly Observed Treatment, Short-course (DOTS) strategy is a government-funded national program in India, and is applicable to all patients with tuberculosis, including children. As per DOTS, 6 months of treatment is sufficient for the treatment

of abdominal tuberculosis.<sup>2</sup> I work in a municipal general hospital where many patients are unable to afford anti-tuberculosis therapy from private sources. Most of the children with abdominal tuberculosis are therefore referred to DOTS for free treatment. We have treated more than 100 children with abdominal tuberculosis, using the 6-month regimen, in the last 5 years. We have not had treatment failure or relapse in any patient who has complied with therapy.

It is not clear in the article<sup>1</sup> on what basis the patient was given anti-tuberculosis therapy for 21 months (initial 9 months plus additional 12 months). Tulczynska et al probably restarted anti-tuberculosis therapy for recurrence of symptoms. However, as the symptoms subsided within 2 days of starting treatment, it is less likely to be due to tuberculosis. Also, if failure or relapse of the disease was considered by Tulczynska et al, then the correct therapy as per DOTS would be a 5-drug anti-tuberculosis therapy.<sup>2</sup> The regimen for failure or relapse cases of tuberculosis as per DOTS is 2 months of isoniazid (H), rifampicin (R), pyrazinamide (Z), ethambutol (E), and streptomycin (S), followed by one month of HRZE, followed by 5 months of HRE therapy. I feel that extending the duration of the anti-tuberculosis therapy without any definite evidence will also extend the duration for which the patient will be exposed to the adverse effects of anti-tuberculosis drugs.

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The author responds:

Thank you for your interest in our recent publication regarding abdominal TB. We hope this letter will answer your questions and will address the issues mentioned in your letter.

As you know, intestinal TB is a distinctive form of abdominal TB, causing extensive scarring of the intestinal wall, followed by progressive decrease of lumen of the involved intestine (stricture formation). This process may continue for many months after anti TB treatment is completed, which raises a question whether stricture formation represents prolonged healing or, perhaps, is a reaction to an ongoing infection.

In our patient the diagnosis of intestinal TB was presumptive, the treatment was empiric, and the patient was not on a Directly Observed Therapy protocol. Because of the controversy surrounding efficacy of pharmacologic agents in treating this form of TB, we were swayed to repeat a full course of treatment (RIPE [rifampin, isoniazid, oyrazinamide, and ethambutol]) for a total of 12 months, which has been used by a number of authors. 1-3

Partial intermittent bowel obstruction is a known complication of intestinal TB. The cause of this condition is mechanical obstruction and it may not relate to TB infection itself. Treatment is symptomatic. Although symptoms of partial bowel obstruction were the sole reason for our patient returning to the clinic, it did not play any role in our decision making to repeat a full treatment course. The main reason for this decision was a lack of documented evidence of the patient's compliance with prior therapy.

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