Background

Tuberculosis (TB), like Crohn’s disease (CD), can affect any part of the gastro-intestinal tract including anus, peritoneum, and hepato-biliary system.

The clinical manifestations of intestinal TB are non-specific and can mimic various gastro-intestinal disorders, especially CD, which can cause a delay in diagnosis and management.

Clinical Presentation

A 10-year-old boy was diagnosed with ileal CD based on clinical symptoms of abdominal pain and weight loss, biochemical features of a raised ESR but normal CRP at presentation, and a distorted ileocaecal valve (ICV) with inflammatory changes seen both macroscopically and microscopically at colonoscopy with radiological confirmation of short segment ileal disease on MRI.

Treatment

He was treated with exclusive enteral nutrition for induction of remission. However, his ESR remained elevated and he required escalation to Azathioprine within 3 months of diagnosis for continued symptoms of abdominal pain and ongoing weight loss.

His clinical course over the next 2 years remained unchanged with a persistently raised ESR and continued disease around the ICV and distal ileum in spite of immunomodulator therapy.

Investigations

Prior to commencing biologic treatment for active CD, he was found to have a positive ELISpot, felt to be consistent with latent TB infection for which he had 3 months of chemoprophylaxis with Rifampicin and Pyridoxine.

Following this, his symptoms of abdominal pain resolved, and he gained 5kg for the first time since his diagnosis. His ESR completely normalised and his repeat MRI showed a significant improvement of the inflammation in the ileum and around the ICV.

This was confirmed with repeat colonoscopy which was markedly improved, although the ICV was persistently abnormally distorted.

Progress

His clinical response to the TB treatment and radiological and endoscopic improvement following chemoprophylaxis led to the suspicion of intestinal TB, although no TB was ever isolated or proven histologically.

Further direct questioning revealed that his grandmother had been diagnosed with TB in India, but had stayed with the family for 6 months prior to the diagnosis, where she had been unwell with a cough and weight loss.

Based on the history of TB exposure and the clinical, biochemical, endoscopic and radiological improvement following latent TB treatment, he completed 6 months of intestinal TB treatment with 4 drug initiation.

Conclusion

- Intestinal TB should always be considered as a differential diagnosis in patients with CD.
- Thorough evaluation of clinical, biochemical, radiological, and histological findings can help to distinguish between the diseases.

Key Learning Points

- Always consider the differential diagnosis, especially when there is no response to treatment.
- Perform an ELISpot early in the diagnosis of inflammatory bowel disease.
- Take a thorough family history at index presentation.