

**Isolated rectal tuberculosis during anti TNF- $\alpha$  therapy: A case report**여의도성모병원 내과<sup>1</sup>김성조<sup>1</sup>, 이한희<sup>1</sup>

Tuberculosis(Tbc) of gastrointestinal tract can provoke from esophagus to anus, most common at ileocecal area. Rectal involvement is not common and it is hard to diagnose. It's important to distinguish from other forms (inflammatory bowel disease, cancer, or infections). Anti TNF- $\alpha$  are widely used for rheumatologic diseases. However, they carry a risk of Tbc infection. We present a case of rectal Tbc patient who was treated with anti TNF- $\alpha$  for 18 months, initially misdiagnosed as Crohn's disease. A 60 years old male had been treated with adalimumab for Rheumatoid arthritis since February 2020. He presented with yellowish perianal discharge at July 2021 and visited to other hospital. Colonoscopy showed about 3cm sized, well-demarcated ulcer covered with exudation at distal rectum and it was initially diagnosed as solitary rectal ulcer syndrome. Although it was treated conservatively for several days, the rectal ulcer remained, so biopsy was done in August 2021 and results reported chronic inflammation with some granulomas and Tbc PCR was negative. However, perianal discharge recurred, follow up colonoscopy and biopsy were done, and the patient was treated with mesalazine suppositories because it was diagnosed as Crohn's disease. However, as symptom was aggravated, the patient visited our hospital. Distal rectal ulcer with exudation (Figure a) was found on sigmoidoscopy. With suspicion of Tbc, we performed another biopsy of the rectal ulcer, which showed granulomatous inflammation with crypt abscess formation (Figure b). Though Tbc PCR was negative, Tbc culture was positive. Interferon gamma releasing assay was converted to positive (it was initially negative before treated with adalimumab). Based on these results, rectal Tbc was diagnosed. He was started on anti-Tbc medication and yellowish discharge was regressed. As Korea is an intermediate Tbc burden area, especially patients as in this case, who are treated with anti TNF- $\alpha$ , are exposed to risk of Tbc infection. When patients visit our hospital with above symptom, we should consider endoscopic findings, endoscopic biopsy, acid fast staining and culture, Tbc PCR, responsiveness to anti-Tbc therapy for diagnosis.

(a)



(b)

