1. Clinical Presentation

A middle-age gentleman, residing in Singapore, presented with altered bowel habits for a 2-week duration, associated with left iliac fossa pain, hematochezia and significant weight loss of 10kg. There was no significant travel history or sick contact preceding the symptoms. Physical examination was unremarkable, except for digital rectal examination which revealed induration in the lower anterior rectum.

He underwent a colonoscopic evaluation (Figure 1) and a computed tomography of his thorax, abdomen and pelvis (CTTAP) (Figure 2). Biopsies of the rectal mucosal lesion, noted in Figure 1, was performed (Figure 3 and 4).

Figure 1: Colonoscopy findings of induration and ulceration of lower rectum

Figure 2: CTAP revealed mild thickening in the rectal wall

Figure 3: Histology appearance of the rectal ulcer
2. Question: What Does the Investigation Findings Show? And The Eventual Diagnosis?

2.1. Answer: Amebic Colitis

Colonoscopic evaluation revealed pancolitis with severe proctitis with ulceration and irregular mucosa in the anterior rectum. CTAP showed mild thickening of the rectal wall without pathologic lymphadenopathy. Histology confirmed the diagnosis of amebiasis with Entamoeba organisms containing ingested red blood cells within their cytoplasm within the surface exude overlying eroded and inflamed colonic mucosa. He was subsequently treated with oral metronidazole for 10 days and paromomycin 500mg for 7 days.

The histological hallmark of amoebic colitis is the invasion of amoeba through the mucosa layer into the submucosal tissue [1]. This causes inflammation and oedema of the mucosal layer resulting in mucosal thickening seen on radiological findings. There are other more common aetiologies for such colonoscopic findings, such as bacteria/viral/ischemic colitis or radiation proctocolitis [2]. The varied presentation and findings of amoebic colitis mimics many differentials such as cancer and inflammatory bowel disease [3, 4, 5]. Therefore, diagnosis of amebiasis is often clinched histologically after biopsy. Obtaining recent travel history to developing countries and history of recent interaction with sick contacts is therefore paramount to prevent discounting this diagnosis.

References