

Introduction

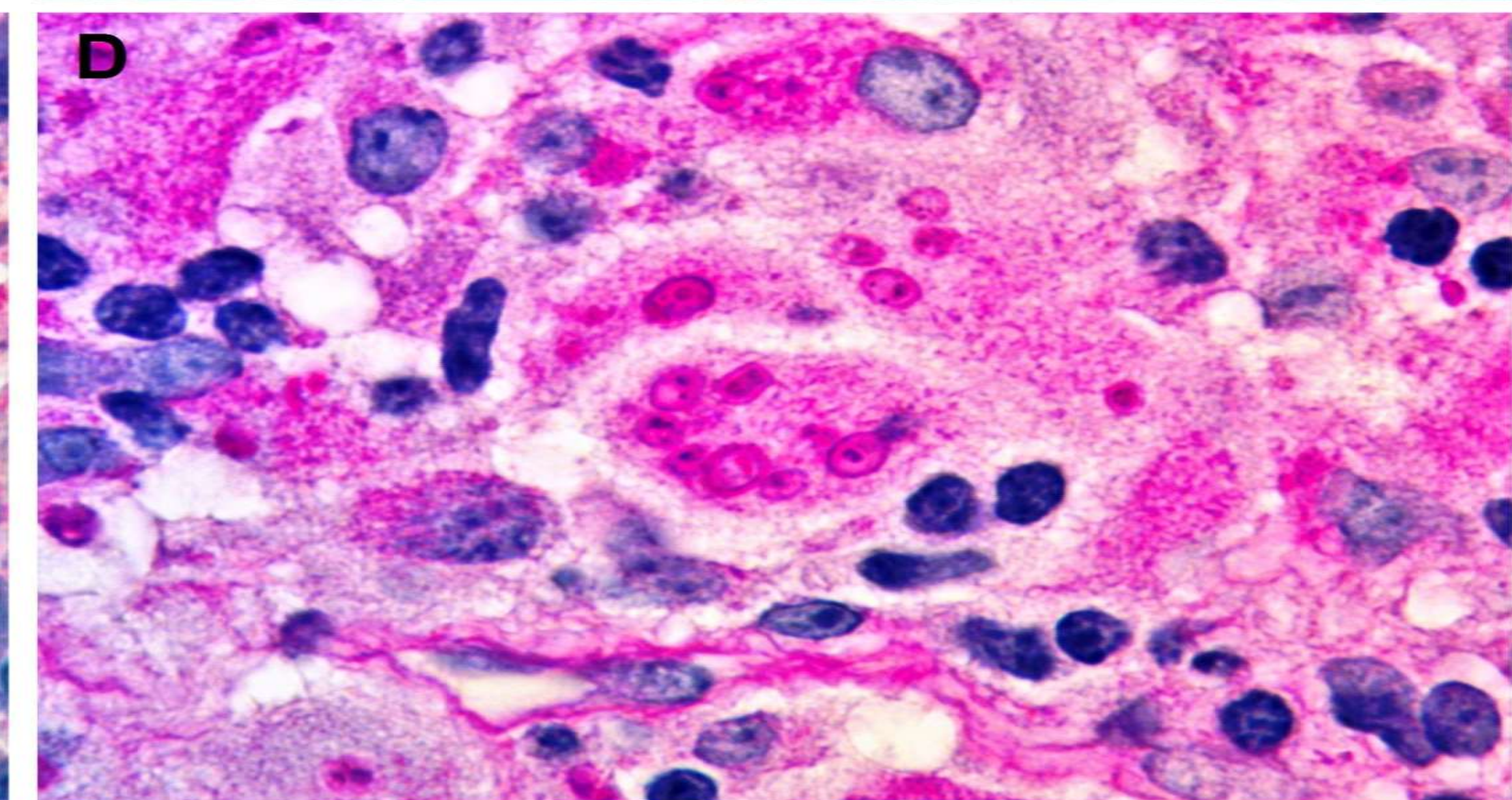
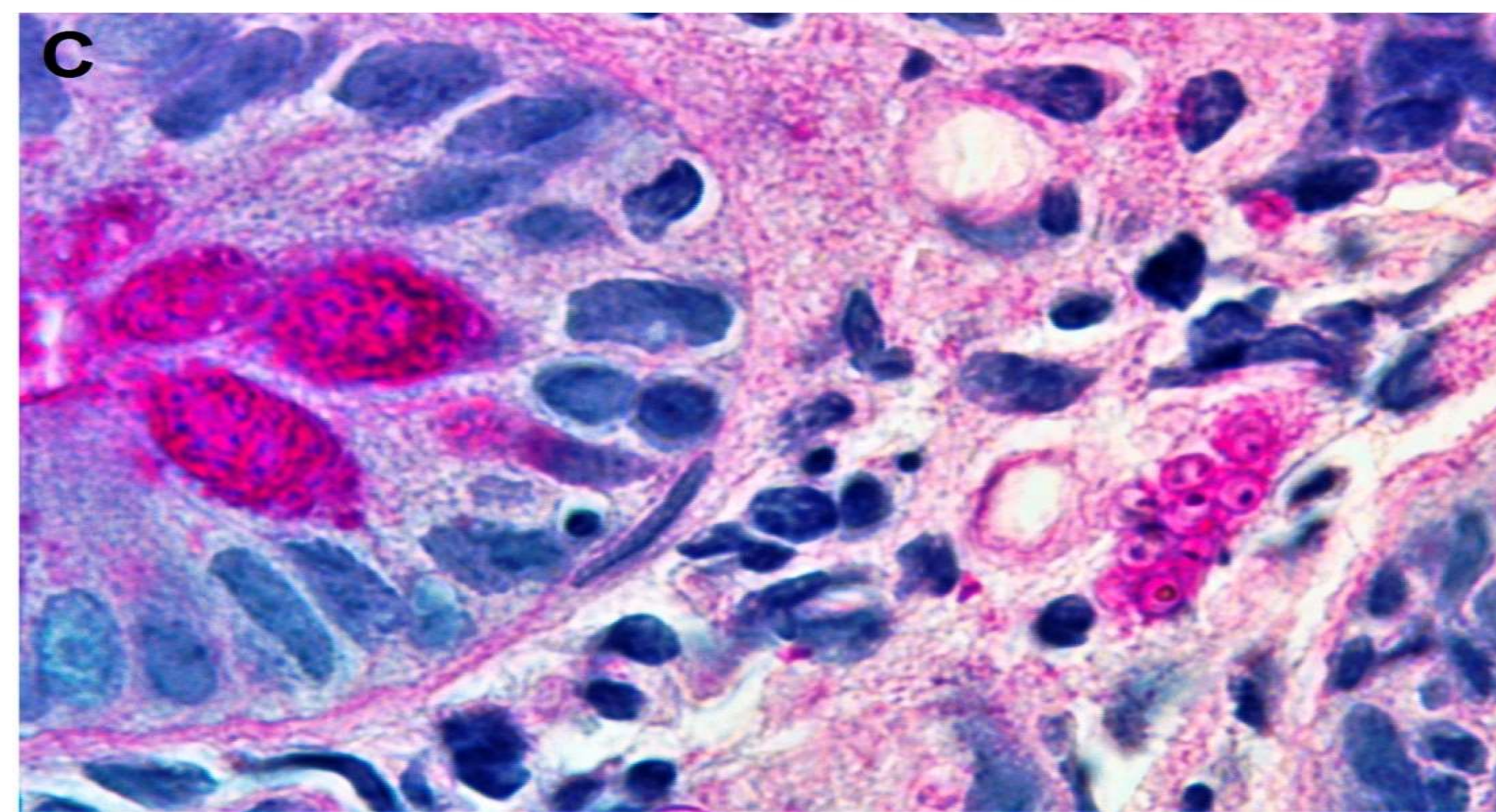
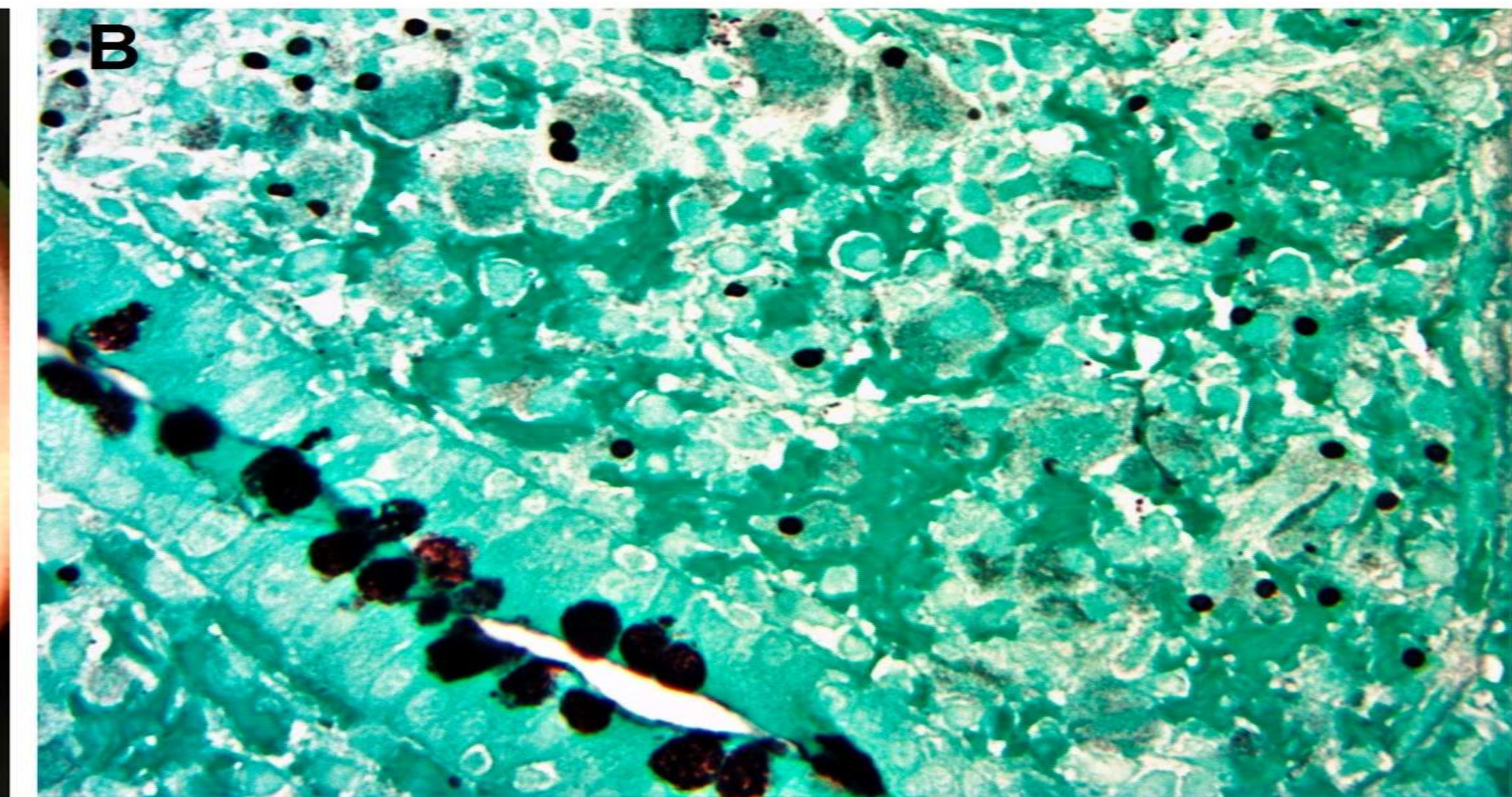
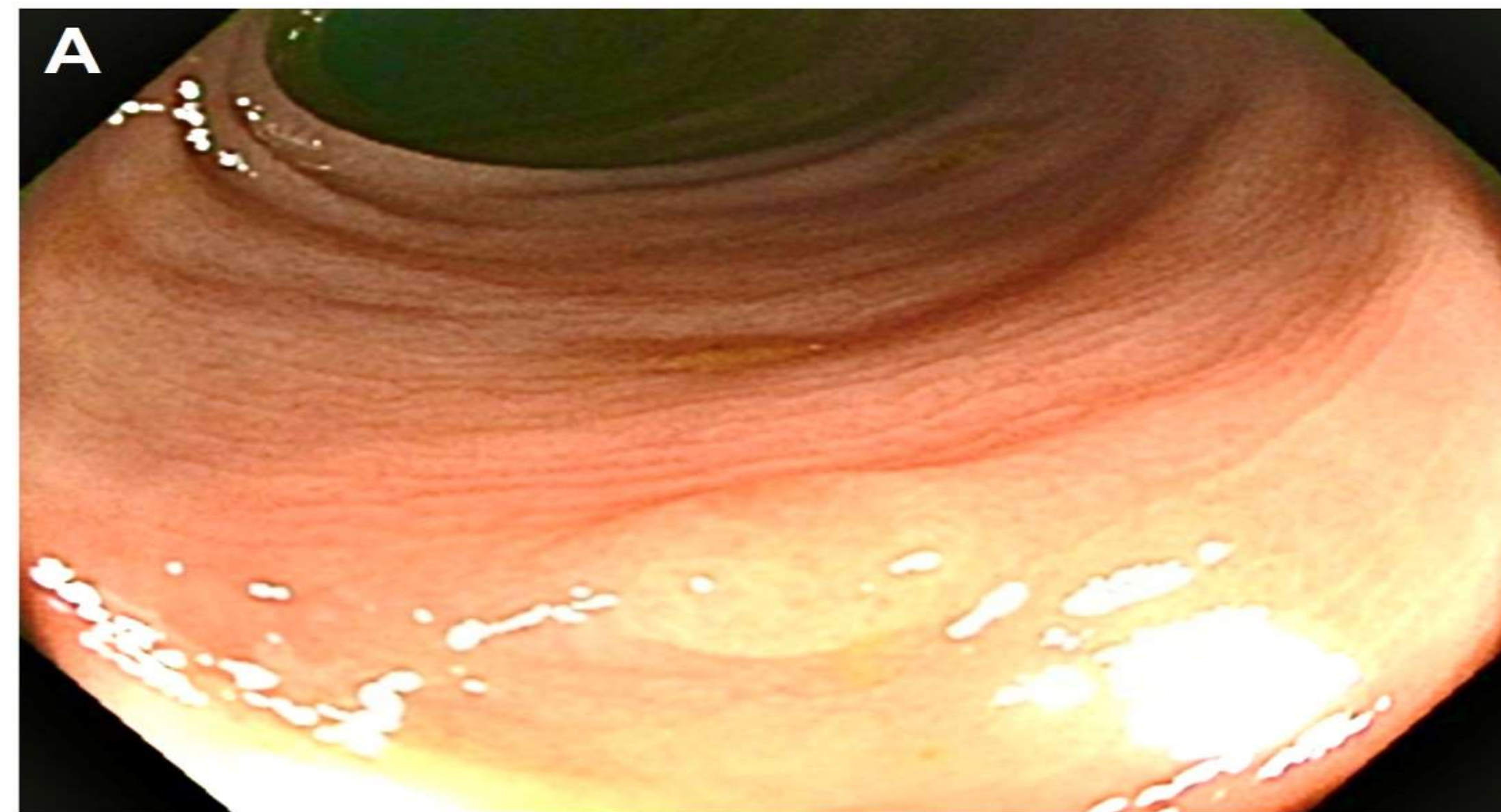
Gastrointestinal histoplasmosis is mainly considered a protean manifestation of disseminated histoplasmosis. It can mimic inflammatory bowel disease (IBD), cancer, or other bowel diseases, presenting diagnostic and therapeutic challenges. To our knowledge, this report represents the first systematic review on isolated colonic histoplasmosis in patients receiving immunomodulator therapy (IMT).

Methods

A systematic search of MEDLINE, Google Scholar, Embase, and Scopus was conducted for English-only studies, published between inception and June 15, 2022. Abstracts from major GI conferences and articles' reference lists were also screened. The search terms "Histoplasma capsulatum," and "histoplasmosis", were combined using the Boolean operators 'AND' and 'OR' with the terms "isolated colonic" and "colon", with all permutations. Two authors reviewed each study to determine eligibility. The search yielded a total of 264 relevant results. However, only 13 articles fulfilled the inclusion criteria.

Results

A total of 13 patients were identified. The mean age was 55.62 ± 10.66 years (females: 62%). Screening colonoscopy incidentally diagnosed histoplasmosis in 38% of patients. Common symptoms were diarrhea 31%, weight loss 23%, or abdominal pain 23%. IMT was mainly administered for liver transplant 31%, renal transplant 31%, and ulcerative colitis 15%. Colonoscopy mostly revealed colonic ulcers 69%, polypoid lesions 15%, or hemorrhage 15%. Colonic biopsy diagnosed 85% of patients. Unfortunately, 15% of patients also underwent GI surgery for diagnosis. Amphotericin B with



itraconazole 54%, itraconazole alone 38%, and amphotericin B alone was administered in 8% of patients. All patients achieved complete recovery.

Discussion

Isolated colonic involvement can be the only clinical presentation of disseminated histoplasmosis. Gastroenterologists should consider it in patients undergoing IMT who present with consistent symptoms. GI histoplasmosis should be ruled out before starting immunosuppressive therapy for colitis due to other causes. Colonoscopic biopsy can aid in the detection (Figure 1). Prompt detection and antifungal treatment

can result in an uneventful recovery. However, delayed identification and improper treatment can lead to death in immunocompromised individuals.

Figure 1

Figure 1. Colonoscopy showing only one sessile polyp in the descending colon (Panel A). Pathology of the polypectomy specimen revealed multiple tiny yeast-like organisms on GMS stain (Panel B). PAS staining confirmed *Histoplasma capsulatum* (Panels C and D). The patient was finally diagnosed with primary isolated colonic histoplasmosis and she recovered well with antifungal treatment.