We report a case of amoebic appendicitis without colitis symptoms. Acute appendicitis is commonly encountered by gastroenterologists in their daily practice. The number of cases of amoebiasis increases annually in Japan, and is thought to be associated with an increase in sexually transmitted disease or travel to endemic areas. However, acute amoebic appendicitis is rare and the prognosis is very poor compared to nonamoebic appendicitis. In our case, appendectomy was performed immediately after onset, and the patient was discharged without complications. It is difficult to differentiate between amoebic and nonamoebic appendicitis preoperatively, and the possibility of amoebic appendicitis should be kept in mind.

Key words: *Entamoeba histolytica*, Appendicitis

INTRODUCTION

In Japan, amoebiasis is typically found in men who have sex with men [1] and individuals with recent travel to endemic areas. Common symptoms are diarrhea, bloody mucoid stool, and abdominal pain, and the course may become chronic. Amoebiasis induces inflammation of the colon [2], especially the rectum and cecum, but does not commonly cause acute appendicitis. Here, we present the case of a 47-year-old man with no risk factors as noted above, who developed acute amoebic appendicitis.

CASE REPORT

A 47-year-old man was referred to our hospital with acute right lower abdominal pain. He had no history of recent travel to endemic areas or acquired immunodeficiency syndrome. Common symptoms are diarrhea, bloody mucoid stool, and abdominal pain, and the course may become chronic. Amoebiasis induces inflammation of the colon [2], especially the rectum and cecum, but does not commonly cause acute appendicitis. Here, we present the case of a 47-year-old man with no risk factors as noted above, who developed acute amoebic appendicitis.
male (80%) and 3 were female (20%), with an average age of 44 years (range, 25–60). All the patients had abdominal pain, but only 2 (13%) had bloody diarrhea. Three-fourth of the patients had no history of travel to endemic regions or HIV infection. Fourteen patients (93%) underwent surgery and 10 (67%) survived. Only one patient (7%) had a preoperative diagnosis of amoebic appendicitis and was treated with metronidazole.

Mortality in amoebic appendicitis in the world is much higher (7–40%) [21] than in nonamoebic appendicitis. There are several reasons. First, a preoperative diagnosis of amoebic appendicitis is almost impossible, because no specific symptoms or examinations distinguish amoebic from nonamoebic appendicitis; a fecal examination has a low detection rate of approximately 50% [22]. Otan et al. reported that only 5 (3%) of 174 cases were diagnosed preoperatively [23]. Second, it is difficult to detect the trophozoites of *E. histolytica* in resected specimens with hematoxylin and eosin staining. When the histopathological findings indicate amoebic appendicitis, such as flask-shaped ulcers and hematophagous changes, it is useful to also conduct PAS.
staining. In the present case, hematophaeous changes were noted in the resected specimen. In addition to risk factors such as men having sex with men or individuals with recent travel to endemic areas, postoperative complications such as intestinal perforation or intraperitoneal abscess could be clues to the diagnosis of amoebic appendicitis.

Lastly, treatment only by appendectomy is inadequate to cure amoebic appendicitis because cases of amoebiasis restricted to the appendix are rare. Therefore, additional treatment with metronidazole is usually necessary. In the present case, postoperative clinical course was satisfactory, but we thought that metronidazole should be given to the patient who was diagnosed as amoebic appendicitis, as the former reports recommend [7,24].

The possibility of amoebic appendicitis should be kept in mind, because the incidence of amoebiasis has been increasing in Japan, and a delay in diagnosis correlates with a poor outcome.

REFERENCES

Fig. 4 Histopathological photomicrographic of the periodic acid-Schiff (PAS) stain showing multiple trophozoites (arrows) of E. histolytica (magnification: ×200).