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Case Illustrated

Incidental diagnosis of oxyuriasis through a colonoscopy

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A 73-year-old Japanese man with hepatocellular carcinoma was admitted to our hospital for a scheduled partial hepatectomy; he did not show any symptoms. Colonoscopy was performed for preoperative evaluation. White moving worms, which were found at the descending colon, partially hid under the intestinal mucosa (Fig. 1A). The worm was identified as *Enterobius vermicularis* through microscopic eggs analysis (Fig. 1B). The patient was administered two doses of 500 mg pyrantel pamoate (two weeks apart); the hepatectomy was performed according to schedule.

Oxyuriasis due to *E. vermicularis* is typically asymptomatic; only 33% of patients have pruritus ani [1]. The incidence of oxyuriasis among adults may be under estimated. Occasionally, it can cause appendicitis and eosinophilic enterocolitis [2,3]. Visualization of worms during endoscopy is unusual [4,5]. The "Scotch-tape" test is used as the standard screening test for *E. vermicularis*. In Japan, the scotch-tape screening test was compulsory for all kindergarten and elementary school children (Fig. 1C). Although an incidence of >2% was reported for southwestern island region (Okinawa) in Japan, this screening program was planned to discontinue in 2016 due to the low national oxyuriasis incidence (0.2% in 2013). Thus, in Japan, oxyuriasis will be a neglected disease among young children in the future.

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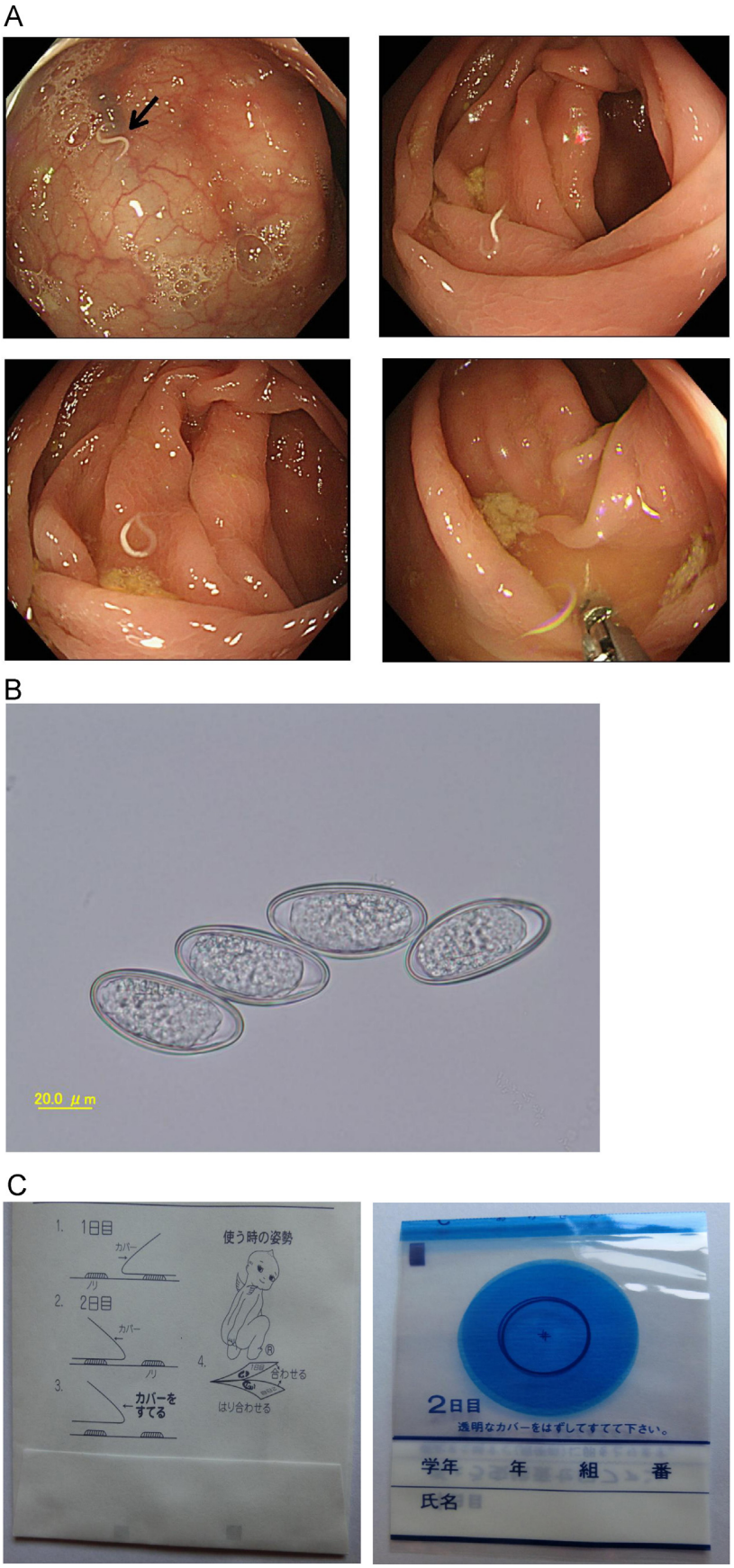

Fig. 1. Photographs of *Enterobius vermicularis* and "Scotch-tape". (A) Colonoscopic view of *E. vermicularis*; (B) microscopic view of *E. vermicularis* eggs. (C) The "Scotch-tape" test used in kindergarten or elementary school children, with familiar angel characters.

Conflict of interest

The authors have declared that no competing interests exist.

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