

## CASE IMAGE

# Small intestinal hamartomatous polyp due to Peutz–Jeghers syndrome in middle childhood

Toshihiko Kakiuchi<sup>1</sup>  | Takashi Akutagawa<sup>2</sup>

<sup>1</sup>Department of Pediatrics, Faculty of Medicine, Saga University, Saga, Japan

<sup>2</sup>Division of Gastroenterology, Department of Internal Medicine, Faculty of Medicine, Saga University, Saga, Japan

**Correspondence**

Toshihiko Kakiuchi, Department of Pediatrics, Faculty of Medicine, Saga University, 5-1-1, Nabeshima, Saga, 849-8501 Japan.  
Email: [kakiucht@cc.saga-u.ac.jp](mailto:kakiucht@cc.saga-u.ac.jp)

**Abstract**

Small-bowel surveillance is recommended from the age of 8 years in asymptomatic individuals with Peutz–Jeghers syndrome. Because intussusception and risk of strangulated ileus were noted in an 11-year-old patient, small-bowel surveillance should be reliably performed from the age of 8 years to avoid urgent surgery.

**KEYWORDS**

intussusception, Peutz–Jeghers syndrome, small-bowel surveillance, small-bowel polyp

## 1 | CASE DESCRIPTION

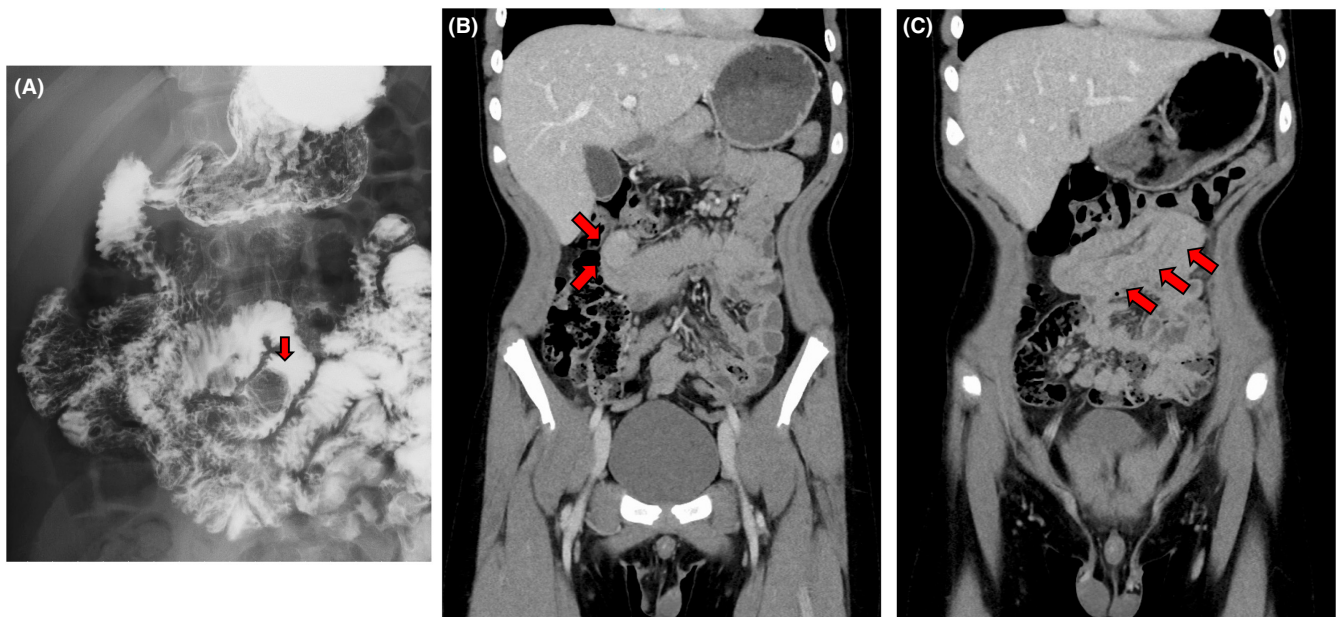
An 11-year-old boy with Peutz–Jeghers syndrome (PJS) was referred to our hospital. Because his mother also had PJS and black pigmentation was noted on his lips, mouth, and limbs (Figure 1), he underwent upper and lower gastrointestinal endoscopy at the age of 8 years at a previous hospital. Endoscopic mucosal resection for duodenal polyp was performed, and the pathological finding was hamartoma. At that hospital, the small intestine could not be evaluated and was left unattended for 3 years. At our hospital, small intestine fluoroscopy revealed a polyp in the jejunum, and abdominal

computed tomography showed two polyps and intussusception (Figure 2), but no gastrointestinal symptom was observed. In double-balloon enteroscopy, the resected polyps were hamartoma with diameters of 20 mm and 30 mm (Figure 3).

Small-bowel surveillance is recommended from the age of 8 years in asymptomatic individuals with PJS, and polypectomy should be performed for small-bowel polyps with diameters >15–20 mm to prevent intussusception.<sup>1</sup> In PJS, the risk of intussusception is approximately 44% by the age of 10 years.<sup>2</sup> Because this patient had risk of ileus by intussusception, small-bowel surveillance for PJS should be reliably performed from the age of 8 years.

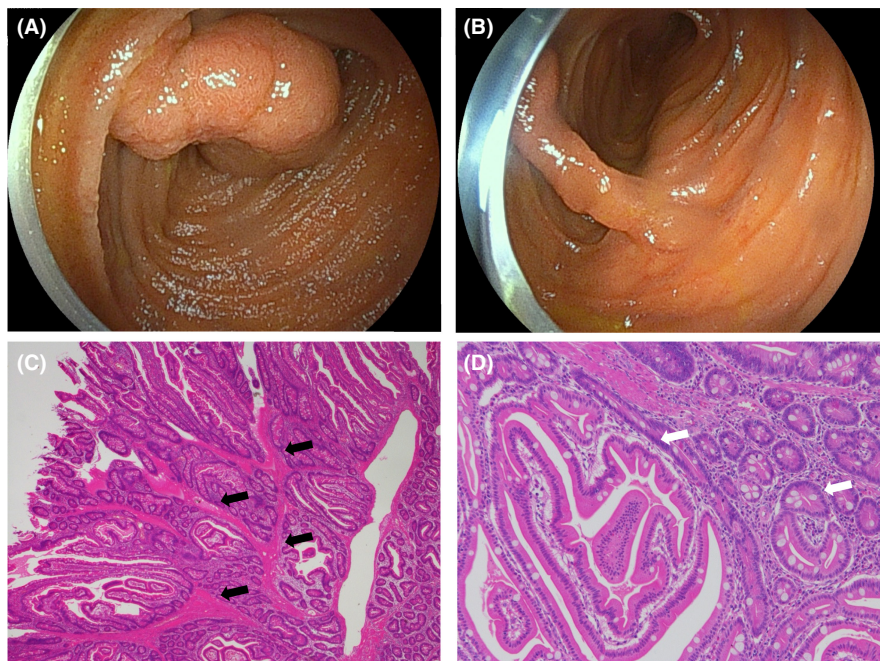


**FIGURE 1** Patient had black pigmentation on the lips (A), oral cavity (B), and palm and sole of the foot (D)



**FIGURE 2** Small intestine fluoroscopy revealed a polyp in the jejunum (A), and abdominal computed tomography showed two polyps (B, C) and intussusception (C)

**FIGURE 3** Double-balloon enteroscopy revealed two pedunculated polyps in the jejunum (A, B). Pathologically, the muscularis mucosae were dendritic and proliferated, and the small intestinal epithelium was hyperplasia-proliferated, which was a consistent finding as Peutz–Jeghers syndrome (C, D). Black arrows: muscularis mucosae and white arrows: small intestinal epithelium



### AUTHOR CONTRIBUTIONS

T.K. was involved in all stages of patient management and wrote the manuscript. T.A. performed the endoscopic treatment and analyzed the data and collaborated as a reviewer. All authors read and approved the final manuscript.

### ACKNOWLEDGMENTS

We would like to thank the patient's parents for providing consent for publication.

### CONFLICT OF INTEREST

None.

### DATA AVAILABILITY STATEMENT

All data generated and analyzed during this study are included in the published article.

### ETHICAL APPROVAL

Written informed consent was obtained from the patient's parents. This report is exempt from ethical approval because it is an observational report after the current care.

### CONSENT

Parental/guardian consent was obtained.

### ORCID

Toshihiko Kakiuchi  <https://orcid.org/0000-0002-9995-5522>

### REFERENCES

1. Wagner A, Aretz S, Auranen A, et al. The management of Peutz–Jeghers syndrome: European hereditary tumour group (EHTG) guideline. *J Clin Med*. 2021;10(3):473.
2. van Lier MG, Mathus-Vliegen EM, Wagner A, van Leerdam ME, Kuipers EJ. High cumulative risk of intussusception in patients with Peutz–Jeghers syndrome: time to update surveillance guidelines? *Am J Gastroenterol*. 2011;106:940–945.

**How to cite this article:** Kakiuchi T, Akutagawa T. Small intestinal hamartomatous polyp due to Peutz–Jeghers syndrome in middle childhood. *Clin Case Rep*. 2022;10:e06001. doi: [10.1002/ccr3.6001](https://doi.org/10.1002/ccr3.6001)