Left sided appendicitis due to situs inversus totalis

Yuki Otsuka[1], Ruiko Hayashi[2], Shinichi Urano[2], Akihide Yashima[2], Yasuo Nanba[2], and Fumio Otsuka[3]

[1]Okayama University Hospital
[2]Kosei General Hospital
[3]Okayama Daigaku - Shikata Campus

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Clinical Image

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Yuki Otsuka, M.D. [1,2], Ruiko Hayashi, M.D.[2], Shinichi Urano, M.D., Ph.D. [3], Akihide Yashima, M.D. [3], Yasuo Nanba, M.D.[3], Fumio Otsuka, M.D., Ph.D. [1]

[1] *Department of General Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, 2-5-1 Shikata-cho, Kita-ku, Okayama 700-8558, Japan*

[2] *Department of Internal Medicine, Kosei General Hospital, 2-5-1 Enichicho, Mihara, 723-0015, Japan.*

[3] *Department of Surgery, Kosei General Hospital, 2-5-1 Enichicho, Mihara, 723-0015, Japan.*

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Corresponding author:

Name: Yuki Otsuka, M.D.

Affiliation: Department of General Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan.

Mailing address: 2-5-1 Shikata-cho, Kita-ku, Okayama 700-8558, Japan

Phone number: +81-86-235-7342, Fax number: +81-86-235-7345

E-mail address:*otsuka@okayama-u.ac.jp*

Key Clinical Message

Situs inversus may mimic the pain localization of acute abdomen. Patients with acute abdomen, especially in elderly patients who are medically healthy, physicians should cautiously diagnose in combination with the imaging studies.

Case presentation

An 87-year-old woman medically healthy presented with abdominal pain. Although she was diagnosed with dextrocardia in her young age, she did not declare it on admission. Abdominal tenderness localised to the left lower quadrant, which corresponded to McBurney's point was revealed; however, on the left side.

Laboratory tests showed leukocytosis (8,700/μL) and elevated C-reactive protein (17.4 mg/dL). Computed tomography scanning revealed transposition of all viscera and left-sided swollen appendix with fecolith and mesenteric panniculitis (**Figure**). She underwent laparoscopic appendectomy under the diagnosis of acute appendicitis and was discharged from the hospital 10 days later.

Unusual pain localization in situs inversus mimic the diagnosis of acute abdomen[1]. That is because patients of situs inversus totalis may not be aware of it themselves, or if they know, may forget to declare it due to good prognosis in cases without heart defects or other underlying diagnoses. Moreover, appendicitis with situs inversus does not always simply demonstrate opposite left lower abdominal pain owing to the nervous system occasionally not displaying the corresponding transposition although the viscera are transported[2]. In patients with acute abdomen, especially in elderly patients who are medically healthy, physicians should cautiously diagnose in combination with the imaging studies.

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Authors' Contribution

YO: contributed to the clinical management of the patients, wrote the first draft, and managed all the submission process. RH, SU, AY, and YN contributed to the clinical management of the patient and revised the manuscript. FO revised the manuscript.

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Figure Legend

Axial and coronal images of abdominal computed tomography. In addition to the transposition of all viscera, left sided swollen appendix with fecolith and mesenteric panniculitis (**arrow**) is observed, which is consistent with appendicitis.

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