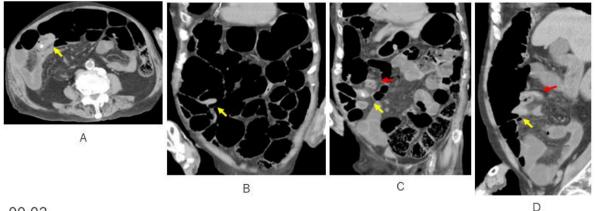
A Case of the 10 days

Case 371

A ninety-three-year-old male was emergently carried by an ambulance car for hypoxia, vomiting and abdominal fulness from morning. His condition was normal until yesterday. Laboratory test revealed white blood cells 19000/mm3, neutrocytes 89%, CRP 13.9mg/dL, procalcitonin 10.39 ng/dL, D dimer 6.2microgram/dL, and blood sugar 194mg/dL. He took abdomen CT for further investigation (Figs. 1, 2) which was considered infectious bowel disease-small intestine type. Two days later, abdominal fullness was expanded to the whole abdomen. Then, he took abdomen CT again (Figs 3-6) which was considered paralytic ileus due to appendicitis. Four days after, ileus tube was inserted to small bowel and contrast medium (Gastrografin) was injected via tip of ileus tube (Figs. 7, 8).



09.02

Fig.1 On the onset day, swollen appendix with fecal stone is depicted on axial CT (A). Appendix with its outlet (yellow arrow) and ileum end (red arrow) are depicted on coronal CT (B, C) and sagittal CT (D).

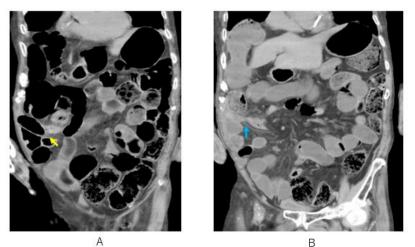




Fig.2 On the onset day, dilated small bowel whose diameter is 3cm or greater and dilated colon are depicted on coronal CT. Note the swollen appendix (yellow arrow) and the occlusive site (blue arrow) which is present, adjacent with appendix.

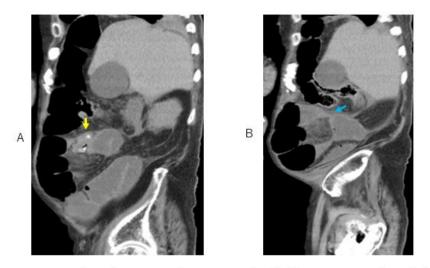


Fig.3 Two days later, swollen appendix (yellow arrow, A) and the occlusive site (blue arrow, B) adjacent with appendix are depicted on sagittal CT. Note mesenteric edema below appendix and occlusive site.

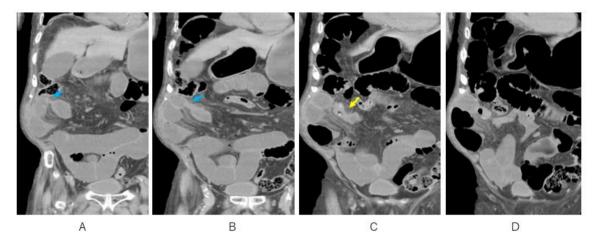


Fig.4 Two days later, occlusive site (A, B blue arrow) adjacent with swollen appendix (C, yellow arrow) are depicted on coronal CT. Note not only dilated bowel but constrictive bowel are depicted on D.

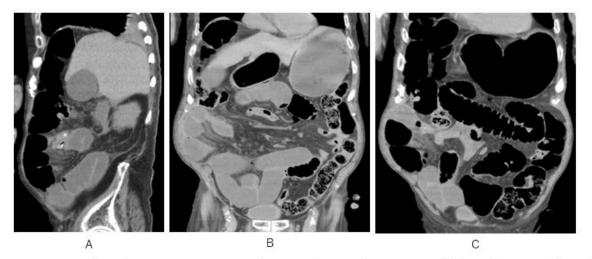


Fig. 5 Two days later, mesenteric edema is depicted on sagittal (A) and coronal (B, C) CT. Note that mesenteric edema concentrate to one point where no beak sign of bowels are absent.

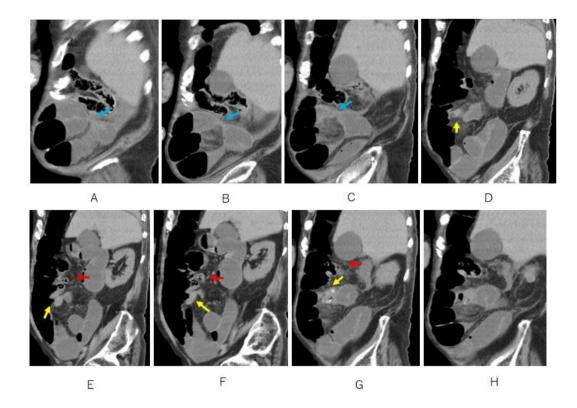


Fig.6 Occlusive site (A-C, blue arrow) adjacent with swollen appendix (D-G yellow arrow), ileum end (E-G red arrow) and mesenteric edema (H) are depicted on sagittal CT.

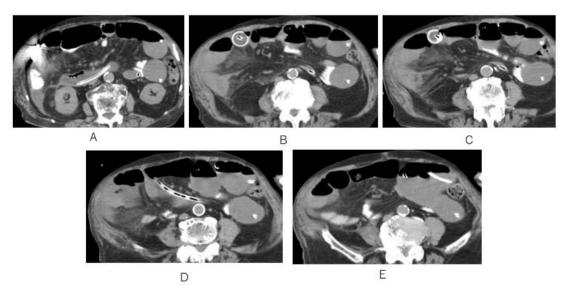


Fig. 7 Four days later, ileus tube (A-D) is advanced to distal bowel and contrast medium (Gastrografin) is injected. Contrast medium is accumulated to colon (A) and constrictive small bowel (A-E) but not to dilated small bowel (B-D) in front and behind the occlusive site.

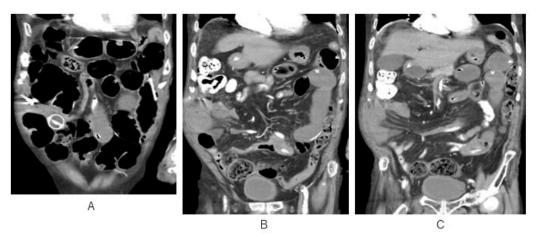


Fig.8 Contrast medium injected into lleus tube delineate colon and constrictive small bowel but not dilated small bowel in front and behind the constrictive site, indicating that contrast medium pass the dilated small bowel speedily and reach the constrictive small bowel, leading to reach colon via constrictive small bowel.

What is imaging diagnosis?

- 1. Adhesive small bowel obstruction
- 2. Strangulation small bowel obstruction
- 3. Dietary small bowel obstruction
- 4. Paralytic ileus

answer

2025.1.24