

A Case of the 10 days

Case 370

A seventy-three-year-old female presented carried in car by her husband for massive vomits last evening, being unable to eat anything thereafter. Laboratory test revealed white blood cells 23400/mm³, neutrocytes 87%, CRP 21.7mg/dL, procalcitonin 1.29 ng/dL, D dimer 6.2microgram/dL, blood sugar 194mg/dL. She took abdomen CT for further investigation (Figs. 1-4). The following day, she took contrast-enhanced abdomen CT, suspicious of ischemic bowel damages (Fig.5)

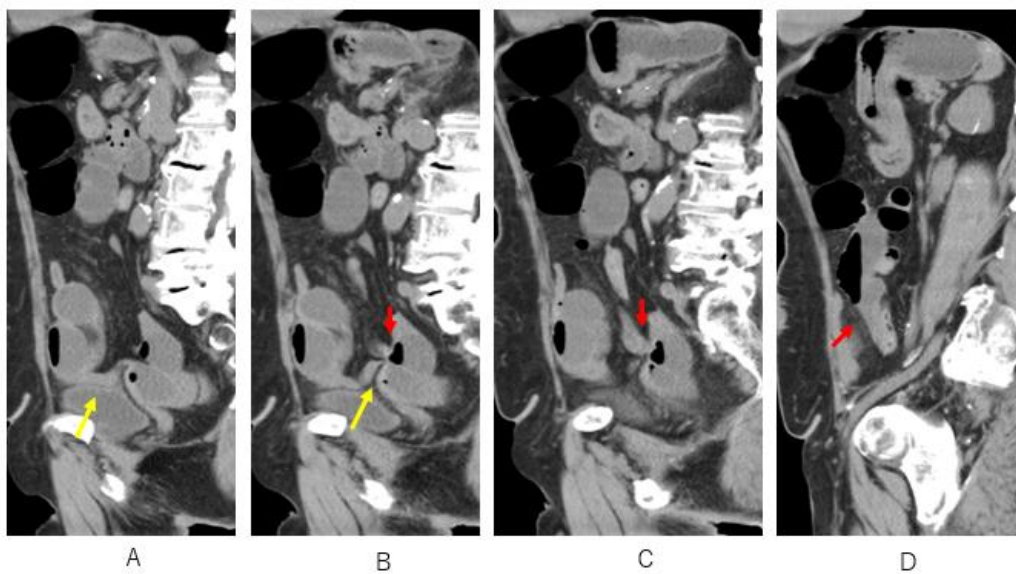


Fig.1 There is a double beak sign on sagittal CT; one is a red arrow that indicates one beak between oral-sided dilated small bowel (B, C, D) and closed dilated bowel (B, C): another is a yellow arrow between anal-sided constrictive (A, B) bowel and closed dilated bowel (A, B).

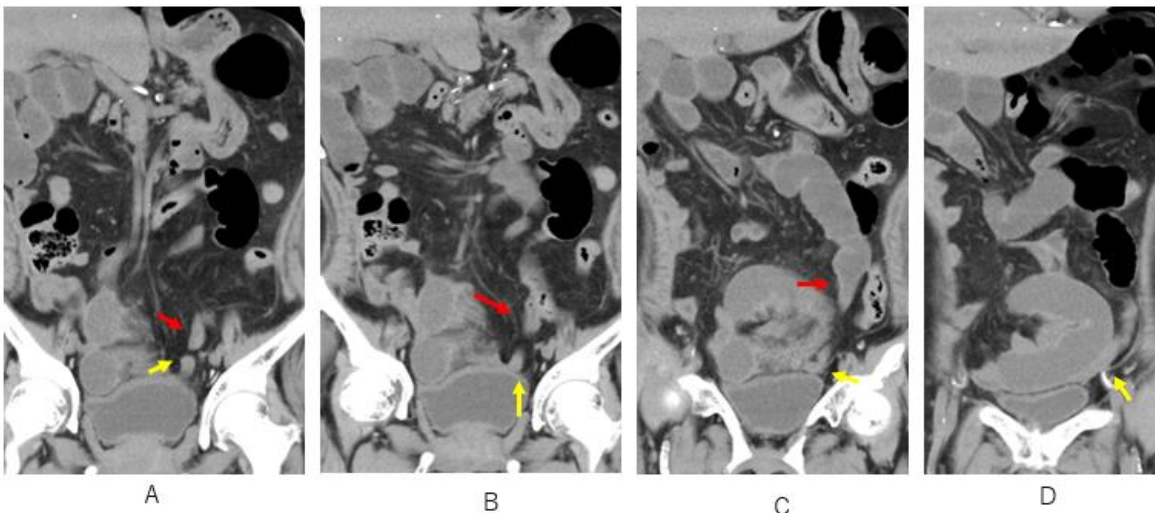


Fig.2 There is a double knot sign on coronal CT; red arrow indicates connection to oral-sided dilated bowel (A-C): another knot indicates connection to anal-sided constrictive bowel (A-D). Note that mesenteric edema heads to double knots (A, B).

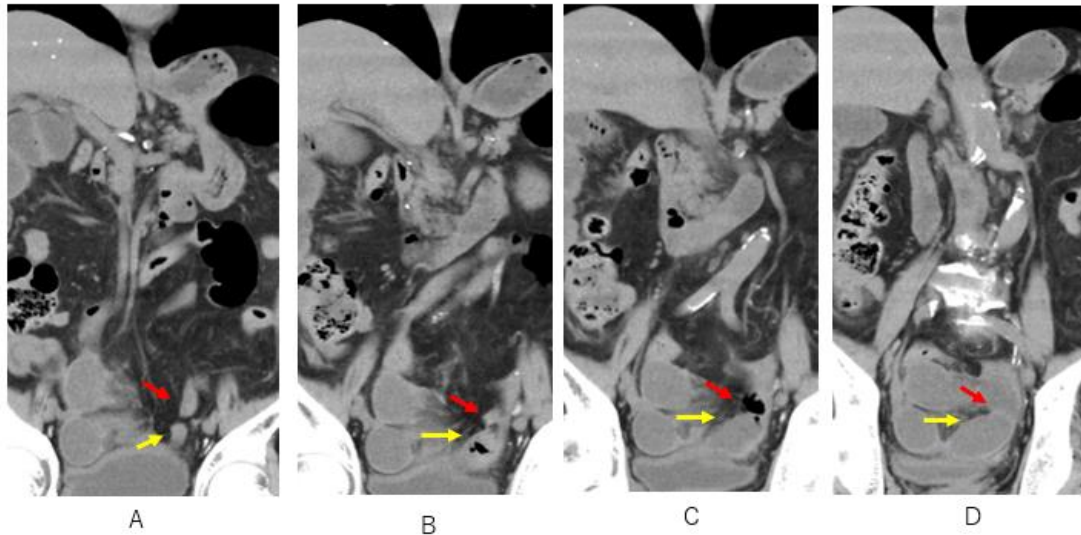


Fig. 3 There is a double knot sign on coronal CT; red oral sided knot indicates connection between oral sided bowel and closed-loop dilated bowel (A-D); yellow anal sided knot indicates connection between closed-loop dilated bowel and anal-sided constrictive bowel. Note mesenteric edema heads to double knot.

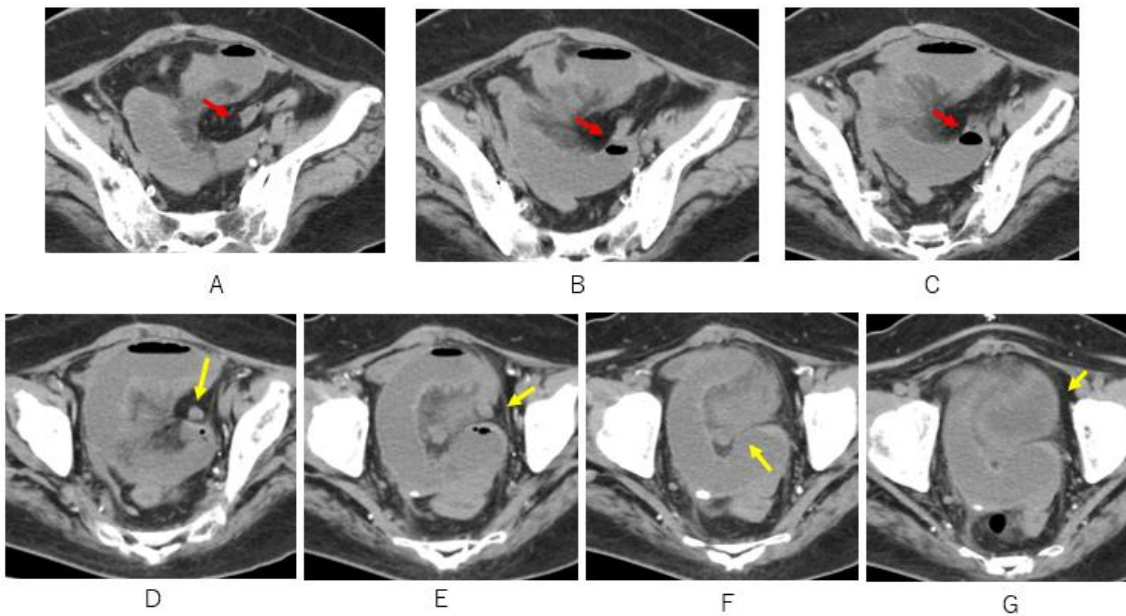


Fig. 4 It is difficult to identify both of double beak sign and double knot sign on axial image. Based on findings obtained from coronal and sagittal images, red knot is depicted between oral mildly constricted bowel and dilated closed loop (A-C), while yellow knot is depicted between anal constrictive bowel and dilated closed loop (D-G).

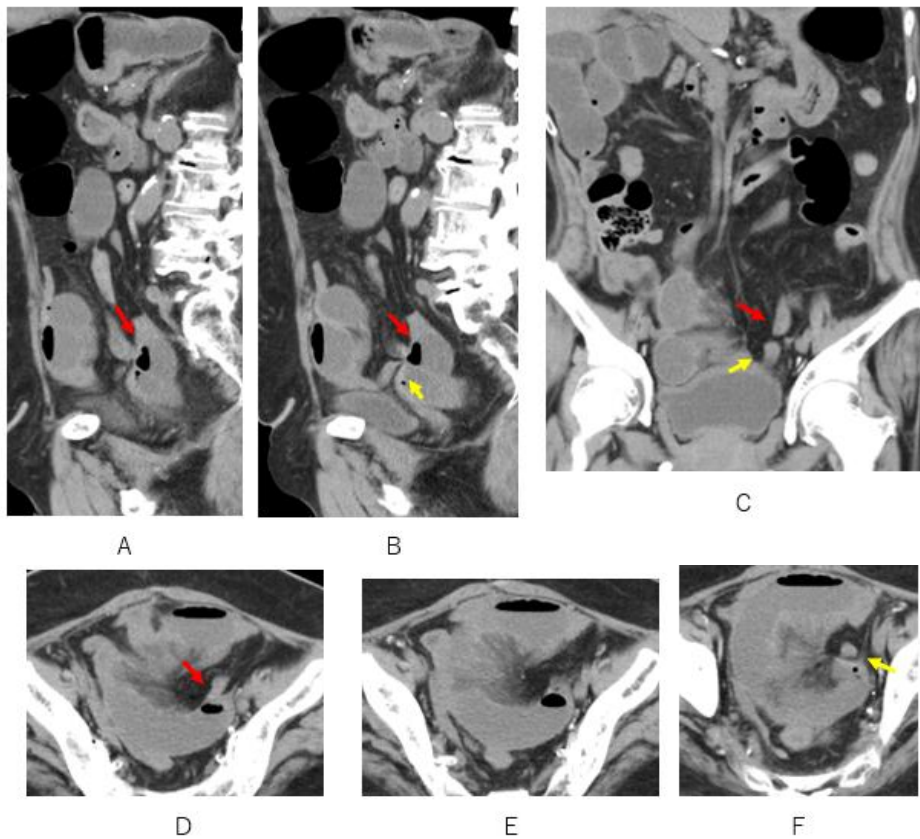


Fig. 5 The following day, a double beak sign is depicted on a sagittal image (A, B), a double knot sign is depicted on a coronal image (C). It is difficult to identify a double beak sign and a double knot sign on axial images (D-F). Note that mesenteric edema heads to a double knot (C).

What is imaging diagnosis?

1. Small bowel invagination
2. Strangulation ileus
3. Adhesive ileus
4. Dietary ileus
5. Paralytic ileus

answer

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