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Coffee bean sign, steel pan sign and whirl sign in sigmoid volvulus

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CASE REPORT

A 66-year-old male presented with abdominal distension. Abdominal examination showed distension and was nontender without rebound. A plain radiograph showed the coffee bean sign, suggesting sigmoid volvulus (SV) (Fig. 1A). The computed tomography (CT) scans identified the steel pan sign, the whirl sign and the beak-shaped transition point (Fig. 1B), confirming SV. The patient improved with colonoscopic decompression and detorsion.

DISCUSSION

SV is abnormal twisting of the sigmoid colon, which may result in ischemia and perforation (1). Plain radiographic signs of SV, such as the inverted U sign and the coffee bean sign, have been diagnostic. However, CT scans are necessary to evaluate twisting sites and ischemia with characteristic signs including the whirl sign and the steel pan sign (1,2). The whirl sign represents tension on the twisted mesocolon of the

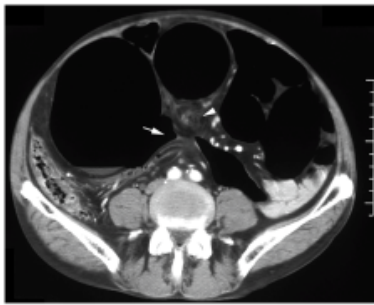
dilated bowel loops and the steel pan sign refers to the circular pattern arrangement of dilated haustral folds resembling the Trinbagonian percussion instrument made from a 55-gallon drum (2).

REFERENCES

1. Levsky JM, Den EI, DuBrow RA, et al. CT findings of sigmoid volvulus. *AJR Am J Roentgenol* 2010;194:136-43. DOI: 10.2214/AJR.09.2580
2. Singh Y, Islam S, Arra A, et al. The steel pan sign of sigmoid volvulus-A case series. *Int J Surg Case Rep* 2017;41:332-5. DOI: 10.1016/j.ijscr.2017.10.064



A



B

Fig. 1. A. A plain supine radiograph showed the coffee bean sign of sigmoid volvulus extending into the subphrenic region. B. An axial CT scan showed the steel pan sign of sigmoid volvulus, the beak-shaped transition point (arrow) of the closed bowel loops and the whirl sign (arrowhead) of the twisted mesocolon.