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| <b>Case</b>    | (542) Twist and shout: a closed loop bowel obstruction (sbo) case report.            |
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## CASE PRESENTATION

A 90-years-old male presented to the Emergency Department complaining left hemiabdomen pain, nausea and constipation.

The patient had a history of high blood pressure, dyslipidemia and colon cancer surgically treated. At the time of admission, patients vital signs were stable. Physical examination was notable for active bowel sounds, left quadrant tenderness, left palpable mass due to known postsurgical eventration and nonfunctional colostomy.

Laboratory studies showed no abnormalities. Abdominal radiography with oral contrast was realized. Revealing Inverted-U-Form small bowel loop on left-upper quadrant, SBO and no oral contrast progression (Illustration A).

Computed Tomography (CT) with intravenous contrast was done showing a big left eventration, SBO and a small amount of intraabdominal free fluid. In addition, there were characteristic "bird beak" sign (White arrow on B), "whirl" sign (Black arrow on C), coffee bean distribution small bowel loop and no distal contrast filling.

There was not pneumoperitoneum nor intestinal ischemia signs. Small bowel closed-loop obstruction was diagnosed. Urgent laparotomy was realized. Surgery demonstrated important adherences and secondary closed-loop obstruction. There was no further complications and the patient was discharged five days later.

## DISCUSSION

A closed-loop obstruction implies a two points obstruction bowel segment. Common causes are adherences, however, internal hernias and congenital or iatrogenic defects are possible causes.

They are important because their complications can be severe, rising to 25% mortality if there is bowel ischemia.

Clinical manifestations are nonspecific, so radiologists play a very important role in the early identification of this entity.

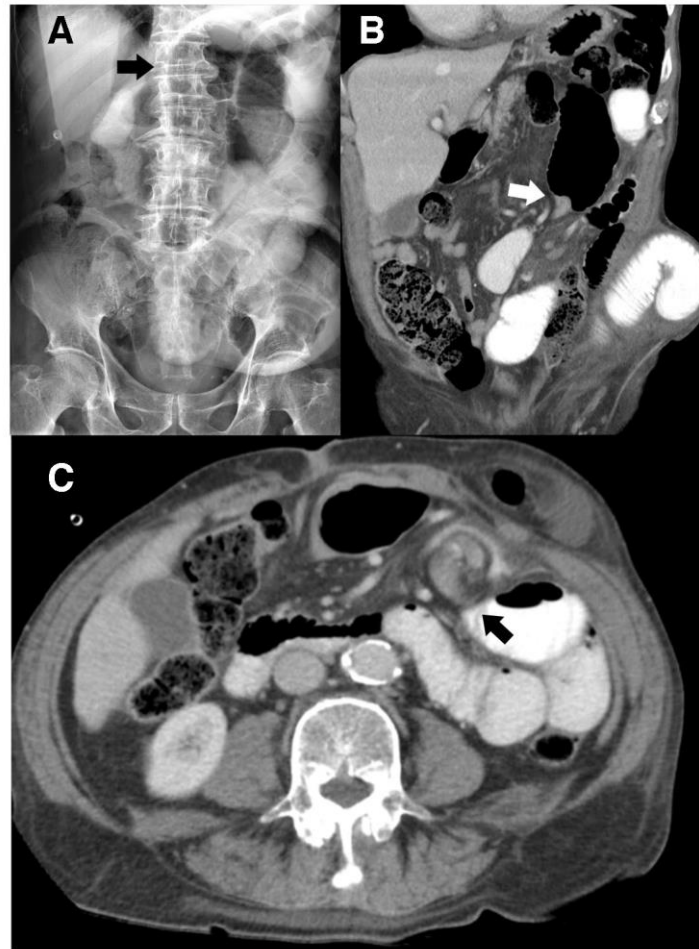
Conventional abdominal radiography should be the initial radiologic examination. It can help from 50 to 86% on small-bowel obstruction diagnosis, as shown in our case<sup>1,2</sup>. However, when surgery is not immediately planned or initial radiographic findings are nonspecific for SBO, CT is recommended.

CT assess the severity and potential causes. CT closed-loop SBO typical features are: The "bird beak" sign, which consists on an abrupt tapering on the site of obstruction, the "whirl sign" when mesentery twist around the obstruction point and U- or C-shaped configuration

at cross-sectional imaging that translate a radial configuration with stretched mesenteric vessels converging toward the site of torsion.

## CONCLUSION

Closed-loop SBO is an uncommon entity with potentially fatal outcomes where radiologists have the main role. It has characteristic features that radiologist should know in order to provide critical information that significantly affects management.



## BIBLIOGRAPHY

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