

Meeting abstract

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**Sigmoid volvulus showing a "whirl sign" on computed tomography**

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**Background**

Sigmoid volvulus is a rare condition. A high incidence has been reported in debilitated, or chronically constipated patients. It is important to recognize this condition early and then initiate prompt treatment. Endoscopic treatment has a high perforation risk. The "whirl sign", was first described by Fisher, as suggesting volvulus of the small bowel, and it was considered that this sign represents the superior mesenteric artery at the centre surrounded by bowel loops. In a patient with sigmoid volvulus, the whirl sign is caused by tightly twisted bowel and mesentery.

**Materials and methods**

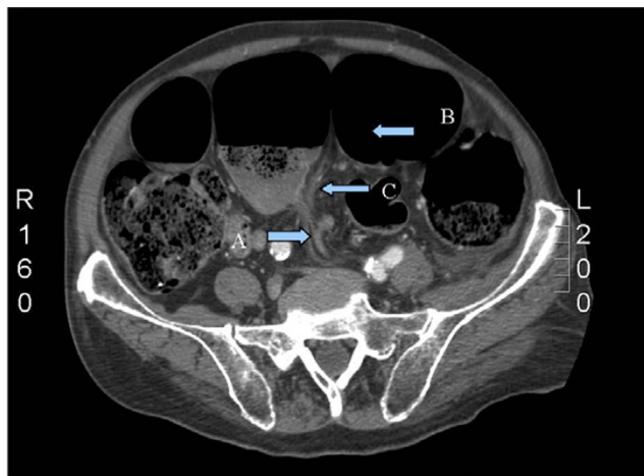
A 88-year-old man was admitted to our hospital with increasing colicky pain. Abdominal X-ray films (Figure 1) revealed gross dilatation of the colon and fluid levels. Abdominal computed tomography (CT) (Figure 2), revealed a dilated colon with air-fluid levels and the whirl sign, which represents twisted colon and mesentery. At the laparotomy a gangrenous sigmoid was found and a Hartmann's procedure was performed. The patient was discharged in the VIII post-operative day.

**Conclusion**

Sigmoid volvulus is uncommon in Western Europe, it nevertheless constitutes the third cause of large bowel obstruction in adults. This condition is an abdominal emergency occurring more commonly in the elderly, sometimes with dementia or neuropsychiatric disorders, chronic constipation and a high-fiber diet. When abdom-



**Figure 1**  
**Abdominal X ray film.**



**Figure 2**  
**Computed Tomography with the Whirl Sign (C).**

inal X-ray films reveal gross colonic dilatation of unknown etiology, a "whirl sign" on CT scan raises the possibility of colonic volvulus.

In the elderly prompt treatment of twisted colon, minimize morbidity and mortality.

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