CASE PRESENTATION

A 36-year old men presented to our emergency department with a ten-day history of abdominal pain, associated with diarrhoea, and weigh loss in addition of episodes of haematochezia, the latter in the last two days. The patient's past medical history included appendectomy and cryptorchidism. Physical examination reveals soft and distended abdomen.

Computer tomography (CT) of abdomen and pelvis showed and important ileocolic intussusception that involved a segment of about 15 cm of ileum terminal and its mesentery, right and proximal transverse colon. CT showed the classic “bowel within bowel” configuration. The affected bowel revealed mural thickening with normal wall enhancement. An intraluminal mass of fatty density of approximately 5x4 cm, as lead point of intussusception, can be demonstrated.

DISCUSSION

Intussusception is a rare cause of intestinal obstruction in adults, accounting for less than 5% of all cases of intussusceptions and represents only 1-5% of intestinal obstruction in adults.

The condition is characterised by the invagination of the proximal loop of the bowel (termed the intussusceptum) into a distal loop of the bowel (known as intussuscripiens), similar how parts of a collapsible telescope slide into one another. This gives a rise the typical bowel-within-bowel image, also known as target sign. The process of invagination pulls the mesenteric fat and vessels into the plane between the intussusceptum and intussuscripiens. This cause kinking of the vessels and may lead to vascular congestion, bowel ischaemia and perforation.

In contrast to children that idiopathic intussusception is more frequent; in adult population, secondary intussusception is associated with pathological lesion involving a lead point which can be a benign cause such as lipoma or malignant tumours. The most common site for lipoma is in colon, and in the small bowel is the ilium. Lipoma is the second most common benign tumour in the colon after adenomas.

CT can demonstrate the target sign with alternating layers of low-density mesenteric fat and soft tissue density bowel wall. It also may be able to identify the lead point responsible for the intussusception: in our case a lipoma, which is usually seen ashomogenous mass with Hounsfield units between -80 and -120. Finally, it helps to exclude other causes of abdominal pain or intestinal obstruction and evaluate for complications such as perforation or bowel ischaemia.

CONCLUSION
Intussusception is a rare condition in adults and CT allows to determine the underlying cause and evaluate potential complications of the intussusception and small bowel obstruction. Lipoma should be considered in case of ileo-colonic or colo-colic intussusception and definitive diagnostic can be made by its characteristic appearance on CT.

**A.** Axial enhancement CT image shows an intraluminal polypoid fatty density lesion (red arrowheads) at the apex of the intussusceptum. **B.** Axial CT scan shows a 'bowel-within-bowel' with three concentric alternating layers of soft-tissue density bowel walls (red arrows) and low-density mesenteric fat (green arrow). **C.** The mesenteric vessels and accompanying fat also appear to be dragged along with the herniated bowel loop (yellow arrows). **D.** Gross pathology revealed one submucosal lipoma (blue arrow).

**BIBLIOGRAPHY**