Case (758) Posttraumatic intussusception of the small bowel: a case

report

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CASE PRESENTATION

We present the case of a 24 year-old patient who had suffered a high energy car accident and arrived at our center with hypovolemic shock. After hemodynamic stabilization, a full body CT scan was performed. In the abdomen, the patient had a ruptured spleen with signs of active bleeding, ruptured liver and important hemoperitoneum (image 1a).

The most curious phenomenon found by the oncall staff of radiologists was the image of several yeyuno-yeyunal intussusceptions (with "target" / "doughnut" sign), with thickening of its walls that indicates suffering (image 1b-d). The patient underwent emergency surgery with desinvagination of the various segmental intussusceptions.

DISCUSSION

Posttraumatic intussusception of the small bowel is an extremely rare finding in cases of blunt abdominal trauma, mostly described in children (1,2). Literature describes few cases of intussusception caused strictly by traumatic injury - The most accepted causes are abnormal peristalsis, sudden deceleration or localized bowel edema (3).

However, the true cause remains questionable. It may come as a surprise to radiologists not aware of this finding. The surgical approach to the intussusception must be treated on a case-by-case basis. Stable patients can be treated conservatively, with nasogastric tube and close surveillance.

However, in most cases, because the energy of the trauma associated is usually high and patients have to undergo surgery for other reasons, as well as when initially stable patients begins presenting symptoms of obstruction, surgical desinvagination is mandatory.

CONCLUSION

Patients with high energy trauma need fast diagnostic tools to guide treatment and surgical approach. One of the rarest findings could be post traumatic intussusception. Radiologists should be aware of this possibility since its correct diagnosis can affect patient's morbidity and mortality.

The correct diagnosis of the intussusception and of its possible complications is needed to guide treatment.

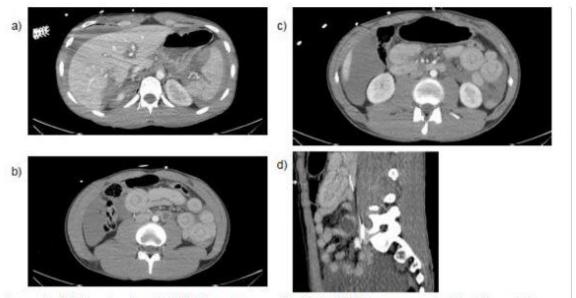


Image 1 - Axial (a-c) and sagittal (d) CT scan images of patient with high energy car accident. Image (a) displays splenic and hepatic lacerations, with hemoperitoneum. (b-d) shows many segmental yeyuno-yeyunal intussusceptions with clear "target sign" associated with thickening of the abdominal wall.

BIBLIOGRAPHY

- Rejab H, Guirat A, Trigui A, Abdelkader M, Beyrouti MI. Post-traumatic jejunojejunal intussusception. Indian J Surg (March-April 2015) 77(2):159-160
- Ko SF, Tiao MM, Hsieh CS, Huang FC, Huang CC, Ng SH, Lee SY, Chen MC (2010) Pediatric small bowel intussusception disease: feasibility of screening for surgery with early computed tomographic evaluation. Surgery 147:521–528
- Weilbaecher D, Bolin JA, Hearn D, Ogden W 2nd.Intussusception in adults. Review of 160 cases. Am J Surg 1971;121(5):531–5
- Incidentally diagnosed intussusception spontaneously resolved in an adult patient after blunt trauma: A rare case report Catherine R Lewis, Omar K Danner, Kenneth L Wilson, L Ray Matthews