Clinical History:
A 78 year old female presents with abdominal pain and distention which had started 72h earlier, and was accompanied by vomiting. The examination showed focal pain in the left lower quadrant and signs of peritonitis.

Imaging Findings:
Supine abdominal radiography showed unspecific dilatation of small bowel loops and a calcification in lower quadrants. Abdominal CT revealed diffuse dilated small bowel loops filled with fluid and a calcification surrounded by soft tissue with entrapped gas in lower quadrants. Soft tissue surrounding the calcification presents signs of inflammation (hyper-enhancement and stranding in the adjacent mesenteric fat). Abdominal CT also showed thickened peritoneum with abnormal enhancement and ascites as signs of peritonitis.

Discussion:
Meckel diverticulum is the most common congenital anomaly of the gastrointestinal tract. It is a true diverticulum composed of all layers of the ileal wall due to a partial obliteration of the onphalomesenteric duct. It is placed on the antimesenteric side of the ileum within 100 cm of the ileocecal valve [1, 3-5, 7, 8].
Meckel diverticulum is usually asymptomatic [1, 3]. Clinical symptoms arise from complications, haemorrhage caused by peptic ulceration from heterotopic gastric mucosa being the most frequent one [1, 3]. Other complications include obstruction, [1] [3] which can be caused by numerous mechanisms (intussusception, volvulus, intestinal hernia, luminal obstruction from inverted diverticulum, neoplastic obstruction, expelled enterolith) and diverticulitis [1, 8].
Most diverticular complications are seen in children. Adult´s complications are usually realted to obstrucción and, less frequently inflammation [4].
Diverticulitis is related to obstruction or narrowing of the mouth of the diverticulum that can be produced by enterolith, parasite, foreign body, stricture, neoplasm.
Enteroliths are considered a rare complication of Meckel diverticulum [1, 2, 5, 6]. It has been suggested that a narrow neck can lead to stasis of intestinal contents and enterolith formation inside the diverticulum. Usually it occurs in Meckel diverticulum without gastric mucosa, which leads to an alkaline environment and precipitation of calcium salts [2, 5, 6]. Enteroliths can cause small-bowel obstruction (secondary to extrusion of enteroliths)[2, 5] or diverticulitis [6, 8] and perforation [2, 7].
Enteroliths can be diagnosed in abdominal radiography [2]. Differential diagnosis of calcification within the abdomen
include renal and biliary calculi, calcified lymph nodes, teratoma, fat necrosis and enteroliths [2]. Imaging evaluation of a complicated diverticulum includes different imaging techniques depending on patient’s age. Conventional barium studies have been replaced by other imaging modalities such as scintigraphy in case of haemorrhage and computed tomography in cases of obstruction, inverted diverticulum, and diverticulitis [1, 3]. Ultrasound should be considered in paediatric patients. Treatment of Meckel diverticulum complications is surgical excision [1, 3, 4]. However, asymptomatic diverticula incidentally discovered has controversial management [1, 4]. Many authors do not recommend prophylactic removal of an incidentally discovered diverticulum because lifetime risk of complications is less than the risks of surgery [1]. Preoperative diagnosis of a complicated Meckel diverticulum is usually difficult [1, 5] because clinical and imaging features are similar to those of other causes of acute abdomen [1].

**Differential Diagnosis List:** Meckel diverticulum enterolith complicated with diverticulitis and peritonitis, Small bowel obstruction secondary to foreign body, Gallstone ileus, Meckel diverticulum enterolith complicated with diverticulitis and peritonitis

**Final Diagnosis:** Meckel diverticulum enterolith complicated with diverticulitis and peritonitis

**References:**


Antony P. Higginson, Richard I. Hall (2001) Meckel’s Diverticulitis Due to an Obstructing Enterolith: Ultrasound and CT Appearances. Clinical Radiology 00:1-3 (PMID: 11446760)


Description: Unspecific diffuse dilatation of small bowel loops. Calcification in lower quadrants. Origin: Department of Radiology, Complejo Hospitalario Universitario de A Coruña
Description: Diffusely distended small bowel loops filled with fluid. Origin: Radiology Department, Complejo Hospitalario Universitario de A Coruña
**Description:** Diffusely distended small bowel loops filled with fluid. Calcification with entrapped gas, surrounded by soft tissue with signs of inflammation in lower quadrants. **Origin:** Radiology Department, Complejo Hospitalario Universitario de A Coruña
**Description:** Calcification with entrapped gas, surrounded by soft tissue with signs of inflammation in lower quadrants. **Origin:** Radiology Department, Complejo Hospitalario Universitario de A Coruña

**Description:** Thickened peritoneum with abnormal enhancement and ascites. **Origin:** Radiology Department, Complejo Hospitalario Universitario de A Coruña