Abstract Type : Poster
Presentation No. : PIK 001

Acute inguinal pain in patient with autosomal dominant polycystic kidney disease undergoing hemodialysis

Jong Hwan Jung, Ju Hung Song, Seon-Ho Ahn
Department of Internal Medicine-Nephrology, Wonkwang University Hospital, Korea, Republic of

Case Study: Autosomal dominant polycystic kidney disease (ADPKD) is most common inherited disorder resulting in end-stage renal disease (ESRD). Mass effect from ADPKD can result in symptoms, including abdominal fullness, dyspnea, and early satiety by increased intraabdominal pressure. Obturator hernia is a rare disease, but if it is not diagnosed immediately, it can lead to significant problems in patients with ESRD patients. Now, we present a rare case with inguinal pain developed due to obturator hernia in patient with ADPKD.

A 67-year-old female, who was on hemodialysis due to ESRD caused by ADPKD, was admitted to the emergent department for acute inguinal pain. She initiated hemodialysis approximately 20 years ago. Her symptom occurred about seven days ago, but it had no effect on use of analgesics. Moreover, nausea and vomiting occurred two days ago. She had borne two children. She had also diagnosed congestive heart failure, but ascites or pulmonary edema were not clinically shown. Abdominal computed tomography showed multiple air fluid levels in small bowel and diffuse dilated proximal and middle small bowel accompanied by focal bowel herniation sac without incarceration. Laboratory data were unremarkable. We performed emergency surgery. Operative findings were initially incarcerated small bowel, but the incarceration improved after manual reduction. After confirming that color of small bowel was recovered, herniorrhhapy was performed. Her symptoms completely improved after surgery.

The incidence of obturator hernia is below 0.1 % of hernia. Theoretically, conditions resulting in increase of intraabdominal pressure can lead obturator hernia. Several factors such as elderly multiparous women, massive ascites, and chronic constipation are main risk factors. However, ADPKD may also be a predisposing factor of obturator hernia. Because total kidney volume of ADPKD increase relatively rapid when ADPKD is diagnosed early, nephrologist should also consider possibility of obturator hernia if the patients have acute inguinal pain.

Figure 1. Computed tomography shows multiple air fluid levels in small bowel and diffuse dilated proximal and middle small bowel accompanied by focal bowel herniation sac without incarceration. The operative finding also shows bluish color change of small bowel.