Sürekli Ayaktan Periton Diyalizinin Nadir Bir Komplikasyonu, Safra Kesesi Perforasyonu: Olgu Sunumu

Gall Bladder Perforation, a Rare Complication of Continuous Ambulatory Peritoneal Dialysis: Case Report

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ÖZET

Sürekli ayaktan periton diyalizi (SAPD) son dönem böbrek yetmezliği olan hastalarda yaygın olarak kullanılan bir tedavi yöntemidir. SAPD tedavisi süresince mekanik ve metabolik komplikasyonlar gelişebilir. Karın içi organ perforasyonu SAPD tedavisinde nadiren görülmektedir. Bu yazıda safra kesesi perforasyonu gelişen bir SAPD hastasını sunduk.

Anahtar sözcükler: periton diyalizi, safra kesesi, komplikasyon

ABSTRACT

Continuous ambulatory peritoneal dialysis (CAPD) is a widely used method in the treatment of end stage renal failure patients. Mechanical and metabolic complications can be detected during CAPD treatment. Perforations of intraabdominal organs are rarely seen complications in CAPD patients. We presented a CAPD patient with gall bladder perforation.

Keywords: peritoneal dialysis, gall bladder, complication

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Introduction

Mechanical and metabolic complications can be seen during continuous ambulatory peritoneal dialysis (CAPD). Hernias, leakage of dialysate around the exit site due to excessive motion of the catheter secondary to improper adhesion in the abdominal wall, genital edema, respiratory problems and back pain are the examples of mechanical complications. Obesity, changes in lipid profile, loss of protein are some of the metabolic complications (1). Perforations of intraabdominal organs during CAPD treatment were reported rarely. Herein, we presented a CAPD patient with gall bladder perforation who admitted to emergency room with abdominal pain, nausea, vomiting, and initially diagnosed as CAPD peritonitis.

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Case

Fifty-year-old male patient with type 2 diabetes and chronic kidney disease, who had started CAPD treatment for chronic renal failure 18 months ago, admitted to the emergency room with abdominal pain, nausea, and vomiting. Diabetes was diagnosed in 1993. In his physical examination, the blood pressure was 140/90 mmHg, pulse rate was 90/min, body temperature was 38.6°C, and also there was a tenderness and voluntary defense in abdominal palpation. Laboratory findings were as follows: fasting blood glucose: 237 mg/dL, urea: 183 mg/dL, creatinine: 8.6 mg/dL, triglyceride: 334 mg/dL, HDL: 42 mg/dL, AST: 179 U/L, ALT: 46 U/L, amylase: 31 U/L, LDH: 587 U/L, normal

electrolyte levels, hemoglobin: 10.6 g/dL, leukocyte: 13 500/mm^3, and thrombocyte: 245 000/mm^3. In peritoneal fluid, there were 600 cells/μL, more than 50% were neutrophiles. The patient was initially diagnosed as CAPD peritonitis, and intraperitoneal antibiotic treatment with cefazolin 1000 mg and ceftazidime 1000 mg was started after the peritoneal fluid samples for cultures were sent. After the first day, abdominal pain, nausea, and vomiting were diminished. There was no bacterial growth appeared in the cultures. On the third day of the treatment, acute abdomen developed. Peritoneal dialysate fluid color was darker at this point which suggested contamination with bile. There were no air fluid levels on the direct abdominal x-ray. The patient underwent an emergency surgery, perforation of gall bladder was revealed, and cholecystectomy was performed. In the examination of gall bladder, hydrops and local necrotic tissues were seen. No complication was observed in the postoperative period.

Discussion

The clinical situations that require urgent surgical intervention may develop during CAPD treatment. These may be complications of CAPD or problems that also can be observed in general population as well. In a study presented by Wellington et al, after seven-year-follow-up of 7 patients, five patients had perforated diverticulitis, and two had ischemic colitis (2). Carmeci et al reported 6 CAPD patients with an urgent abdominal surgery after eight-year-follow-up; 3 of them had perforated acute appendicitis, 2 had perforated diverticulitis, and one had suppurative infection (3). Intestinal infarction, organ perforations, and neoplasms were also presented as the reasons for urgent surgery (4). Geddes et al presented a case with gall bladder rupture followed by peritonitis most likely due to klebsiella infection (5).

We thought that coincidentally with renal failure there were bile stones in the gall bladder that was hydropic and perforation was a result of a local inflammatory process in our case. The number of WBC's in the peritoneal fluid was not so high and there was no bacterial growth in the culture which also supported this opinion.

Conclusion

Organ perforations were rarely reported in CAPD patients. The most common reported perforations were colonic ones. Gall bladder perforation was very rare in these patients. However, in a diabetic patient with renal failure, a cholecystitis with gallstones may be mortal; so, when cholelithiasis is diagnosed, diabetic patients should be operated electively.

References

1. Gokal R. Techniques, indications, and complications of peritoneal dialysis. In: Massry SG, Glassock RJ (eds), Textbook of Nephrology. 4th ed. Lippincott Williams & Willkins, Philadelphia 2001;532-1542
2. Wellington JL, Rody K. Acute abdominal emergencies in patients on long term ambulatory peritoneal dialysis. Can J Surg 1993;36:522-524.
3. Carmeci C, Muldowney W, Mazbar SA, Bloom R. Emergency laparotomy in patients on continuous ambulatory peritoneal dialysis. Am Surg 2001;67:615-618.
4. Miller GV, Bhandari S, Brownjohn AM, Turney JH, Benson EA. 'Surgical' peritonitis in the CAPD patient. Ann R Coll Surg Engl 1998;80:36-39.
5. Geddes CC, Waterston A, Asari A, Smith W. Perforation of the gall bladder in a patient on continuous ambulatory peritoneal dialysis. Nephrol Dial Transplant 1996;11:2493-2494.