中文題目:膀胱破裂併發嚴重腹腔內感染

英文題目: Urinary bladder rupture with severe intra-abdominal infection

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## **Introduction**

Urinary bladder rupture is an uncommon complication after pelvic radiotherapy, while intra-peritoneal urine leakage mimicking ascites with severe intra-abdominal infection is even rare. Herein, we present a case of late-onset bladder rupture complicated with severe intra-abdominal infection few years after treatment for her cervical cancer.

## **Case Presentation**

A 60-year-old woman with a history of diabetes mellitus and cervical cancer had received operation, chemotherapy, and radiotherapy about nine years previously. She was admitted to the intensive care unit for septic shock. Abdominal computed tomography (CT) scan revealed acute cholecystitis and massive ascites. Percutaneous transhepatic gallbladder drainage was done and the bile culture yielded Escherichia coli. Ascites analysis showed pleocytosis with a predominance of polymorphonuclear cells and the presence of few gram-negative bacilli and gram-positive cocci. Both blood and ascites cultures yielded Morganella morganii. Although adequate empirical antibiotic treatment with ceftriaxone was given, her sepsis progressed. The follow-up ascites examination showed worsening in pleocytosis and the presence of few gram-positive cocci, as well as elevated lactate dehydrogenase level, decreased glucose level, and low serum-ascites albumin gradient. The antibiotic was therefore changed to meropenem and teicoplanin. The follow-up ascites culture later yielded carbapenem-resistant Acinetobacter baumannii and Enterococcus faecium, which were uncommon pathogens isolated from the ascites. Repeated abdominal CT revealed a small extraluminal air bubble adjacent to the urinary bladder. Bedside cystography revealed intraperitoneal rupture of the urinary bladder with a defect at the posterosuperior wall. However, her general condition was so poor that surgical intervention was considered too risky. Despite intensive care, she died of septic shock few days later.

## **Discussion**

Urinary bladder rupture is usually related to trauma or iatrogenic injury. It is rarely caused by radiotherapy and may be a life-threatening condition. The symptoms are often nonspecific, and misdiagnosis is common. Our case of intra-peritoneal bladder rupture mimicking massive ascites presented with signs of secondary peritonitis with unusual multiple pathogens in the ascites. In summary, our case highlights that urinary bladder rupture must be considered in patients presenting with massive ascites, especially when unusual multiple pathogens were isolated from the ascites.