Left-sided emphysematous pyelonephritis with pneumomediastinum

This 45 year old man has a history of mental retardation, and diabetes mellitus for 3 years without medications. He suffered from left flank pain with shortness of breath for 3 days. In addition, fever, poor appetite, malaise and weakness for 2 weeks were also complained. Tachypnea, tachycardia and desaturation were noted after admission, but he was afebrile and there was no symptom of shock. Laboratory data revealed WBC: 34000/mm³, CRP: 203 mg/L, blood sugar: 512 mg/dl, Cr: 2.6 mg/dl and platelet: 235 K/mm³. Chest X-ray and KUB presented mediastinal widening, pneumomediastinum, subcutaneous emphysema at left neck (Panel A) and mottled gas opacity over left abdomen (Panel B). Computed tomography revealed left emphysematous pyelonephritis with extrarenal extension, pneumomediastinum and subcutaneous emphysema over left lower neck (Panel C and D). Percutaneous drainage was performed initially. Left-sided retroperitoneal abscess debridement was done one week after and another two times of debridement were carried out subsequently. *Escherichia coli* were isolated from wound culture but not form blood cultures. Under antibiotic treatment, the infection was controlled and his renal function improved. He was discharged one month later.