



Unusual presentation of emphysematous pyelonephritis

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A 65-year-old female with a known case of diabetes mellitus presented with complaints of pain in her right thigh and fever for the past 10 days. On examination, patient had emphysema of the right thigh extending into the anterior abdominal wall. Computed tomography (CT) of the abdomen showed the right kidney with emphysematous pyelonephritis with extension into the perinephric and muscular planes. Right percutaneous nephrostomy was performed along with supportive care. Cultures from pus to blood had grown *Escherichia coli* (*E. coli*), the most common organism causing emphysematous pyelonephritis. Most such patients can be managed with supportive care and medical therapy, but nephrectomy may be required in patients not responding to medical therapy and with extensive EPN and septic shock (Fig. 1).

Huang-Tseng classified EPN into four stages based on CT findings: Stage 1 is classified as gas in collecting system only, Stage 2 as gas in renal parenchyma only, Stage 3 as gas in renal parenchyma with extrarenal extension, Stage 3 is further subclassified as Stage 3a extension of gas or abscess to perinephric space and Stage 3b extension of gas or abscess to pararenal space, and Stage 4 as bilateral emphysematous pyelonephritis or solitary kidney with emphysematous pyelonephritis.

Compliance with ethical standards

Conflicts of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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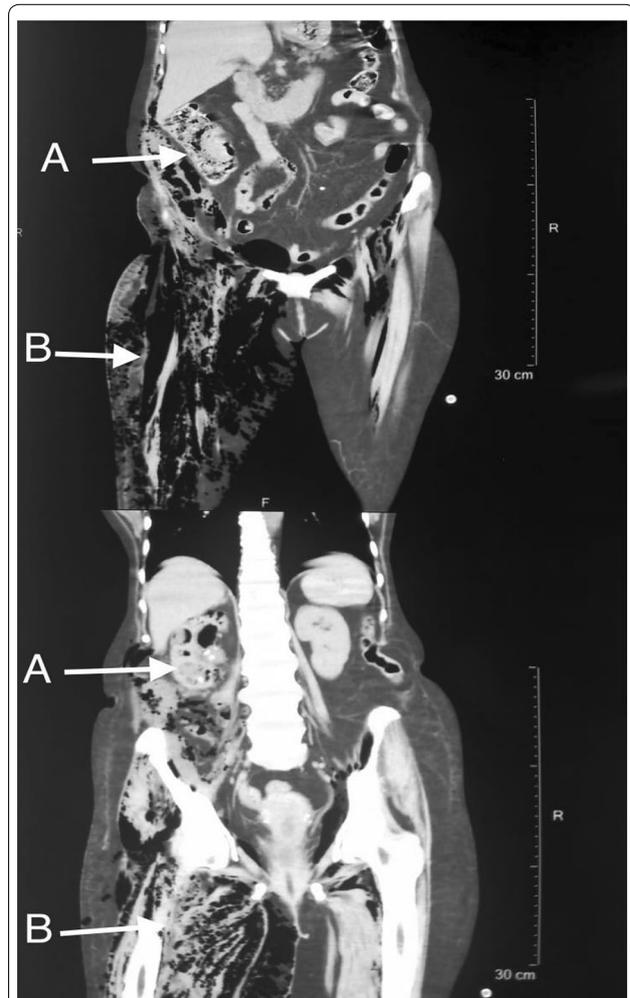


Fig. 1 Coronal section NCCT abdomen. **a** Air in renal and perinephric space (emphysematous pyelonephritis). **b** Air in subcutaneous and muscular planes

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