

Emphysematous perirenal abscess mimicking a gastric gas bubble

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Picture 1. Abdominal radiograph revealed a big gas bubble in the left upper abdomen with normal distribution of colonic gas (arrows) 169x171mm~(72~x~72~DPI)

Emphysematous perirenal abscess mimicking a gastric gas bubble

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A 65-year-old woman with diabetes mellitus and hypertension presented with a 2-week complaint of left flank pain and intermittent fever. The patient stated no vomiting or diarrhea. Abdominal radiograph revealed a big gas bubble in the left upper abdomen with normal distribution of colonic gas (Picture 1, arrows). Chest radiograph demonstrated the gas bubble with an air-fluid level. A gastric gas bubble was suspected initially. However, the distance between the left diaphragm and the top of gas bubble was greater than 3 centimeter. Abdominal computed tomography (CT) scan confirmed a big emphysematous abscess in the left perirenal space compressing the left renal parenchyma (Picture 2, arrows). This patient was treated with percutaneous abscess drainage and broad-spectrum intravenous antibiotics. Follow-up CT one month later showed complete resolution of the abscess, and then the percutaneous drainage tube was removed.

Emphysematous perirenal abscess is an infection associated with gas formation surrounding one or both kidneys. It is a rare and life-threatening disease with a high mortality rate. Diabetes mellitus and urolithiasis are the major risk factors for emphysematous perirenal abscess (1). In addition, most patients were women and most patients were over age 60 and diabetic. *Escherichia coli* and *Klebsiella pneumoniae* are the most common pathogens of emphysematous perirenal abscess (1). In the treatment of emphysematous perirenal abscess, appropriate medical treatment

should be initiated, including systemic antibiotics and well control diabetic, etc., and immediate drainage or surgical intervention should not be delayed (2).

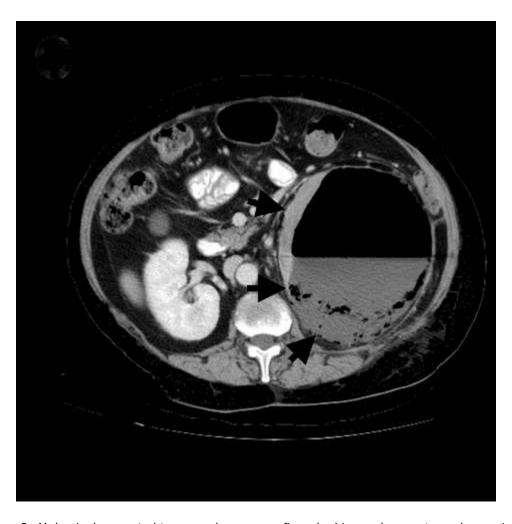
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Picture 2. Abdominal computed tomography scan confirmed a big emphysematous abscess in the left perirenal space compressing the left renal parenchyma $169 \times 169 \text{mm}$ (72 x 72 DPI)