Emphysematous pyelonephritis

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An 82-year-old diabetic lady presented with acute confusion. She was afebrile, hyperglycaemic and in acute renal failure. Her abdomen was mildly distended and she had loin tenderness. An abdominal radiograph shows extensive gas within the right renal parenchyma and subcapsular region (Fig 1). These findings were confirmed with a CT scan (Fig 2). Findings are consistent with those of emphysematous pyelonephritis, to which diabetics are prone. There is no gas extension into the ureter, bladder or retroperitoneum. Initial symptoms and signs are often non-specific and there is a high associated mortality unless treated aggressively. Treatment revolves around fluid resuscitation and systemic antibiotics for *E. coli* and *Klebsiella* species. Percutaneous drainage is indicated in cases with obstruction.

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![Fig 1. An abdominal radiograph showing extensive gas within the right renal parenchyma (a) and subcapsular region (b).](image1)

![Fig 2. CT scan with unenhanced coronal section images with arrows showing intra-substance gas within the right kidney.](image2)

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