

# RENAL ABSCESS

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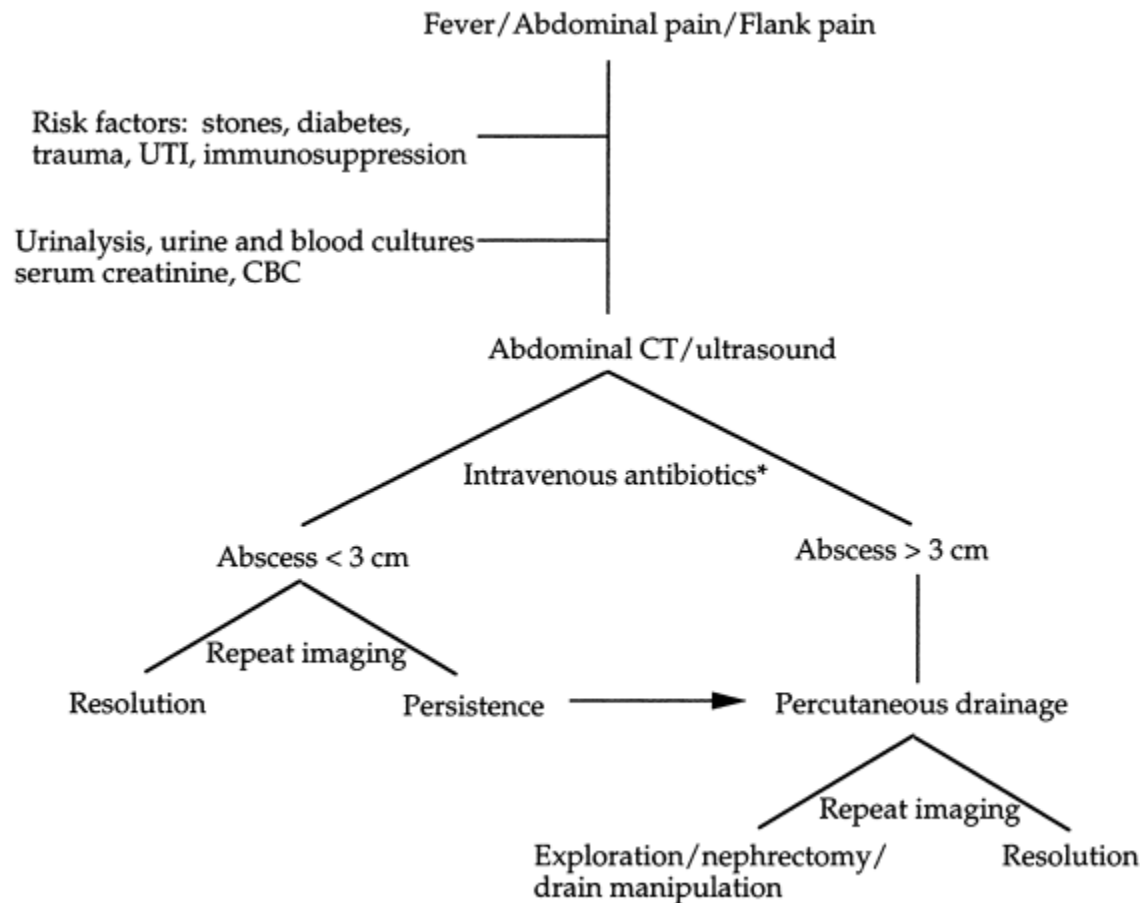
# INTRODUCTION

- **Renal abscesses** are collections of walled-off, infected, and purulent fluid in the renal parenchyma that are commonly associated with underlying pyelonephritis.
- **Risk factors:** diabetes mellitus , anatomical abnormalities such as vesicoureteral reflux, neurogenic bladder, polycystic kidney disease, and ureteral calculi.
- **Clinical manifestations** of renal abscesses include fever and chills, flank pain with radiation to the abdomen and costovertebral tenderness.

# INVESTIGATIONS

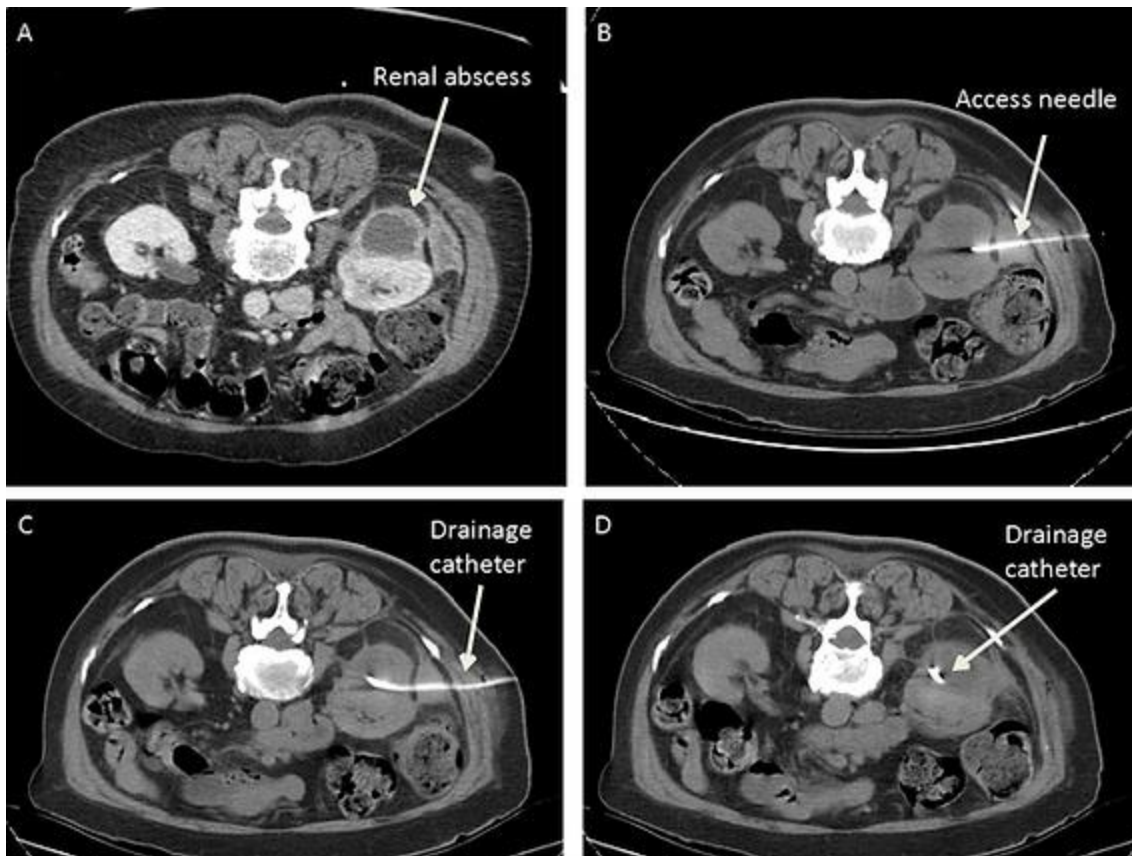
- **Laboratory findings:** leukocytosis with elevation of erythrocyte sedimentation rate and C-reactive protein.
- **Contrast enhanced CT is gold standard.**
- **CT findings** of renal abscesses are a focal collection of fluid with a thickened, irregular enhancing wall.
- Other findings : gas within the central fluid, fascial and septal changes, and perinephric fat plane dissipation.
- **Ultrasound findings** show a hypoechoic or cystic mass with lack of vascular flow indicating an infectious process rather than neoplasm.

# APPROACH TO RENAL ABSCESS



\*consider urinary drainage if obstruction present

## Percutaneous Renal Abscess Drainage



Axial CT images of the abdomen with contrast highlighting right renal abscess with subsequent drainage.

A. Right renal abscess (white arrow) with ring of hyperdensity surrounding the fluid collection.

B. Percutaneous access needle entering the renal abscess (white arrow).

C. Insertion of drainage catheter into the abscess (white arrow).

D. Drainage catheter coiled in the abscess (white arrow).