Quiz 23-03-2026
NSAID & AKI

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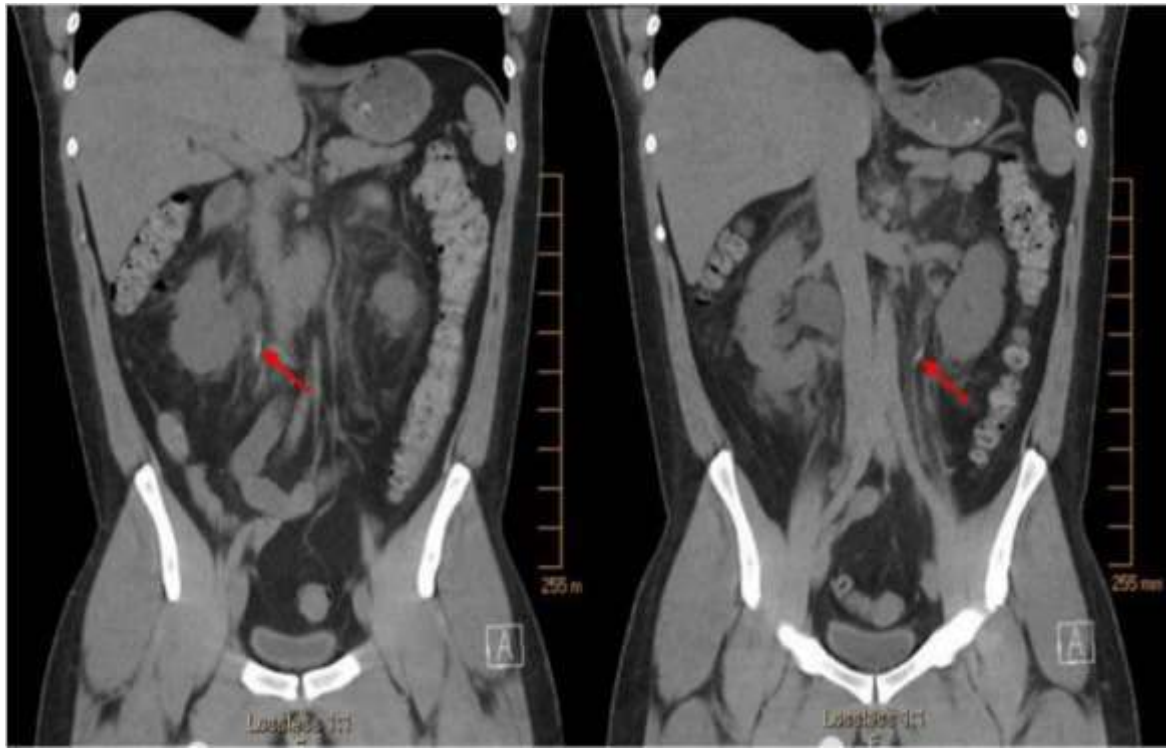
Question 1

- A 60-year-old man with diabetes and long-term NSAID use presents with flank pain, sterile pyuria, and intermittent hematuria. He reports passage of tissue fragments in urine. CT urography shows calyceal abnormalities.



Which of the following statements regarding renal papillary necrosis is **FALSE**?

A. The papillary tip is particularly vulnerable due to limited blood supply and relative hypoxia

B. Non-selective NSAIDs are more commonly implicated in papillary necrosis than selective COX-2 inhibitors

C. Imaging cannot help in differentiating acute from chronic papillary necrosis

D. Sloughed papillae may cause ureteral obstruction and colicky pain

Answer-- Imaging cannot help in differentiating acute from chronic papillary necrosis

- **C is FALSE:**
  Imaging can provide clues:
  - *Acute:* non-enhancing papilla, filling defects
  - *Chronic:* calyceal clubbing, calcification, scarring
- **A:** Papilla = end-arterial, hypoxic → ischemia-prone
- **B:** Non-selective NSAIDs → stronger PG inhibition → ↓ medullary perfusion
- **D:** Sloughed papilla → obstruction → colicky pain

2. Assertion–Reason

- **Assertion (A):**
  Classical (phenacetin-related) analgesic nephropathy is strongly associated with an increased risk of urothelial malignancy.
- **Reason (R):**
  medullary ischemia due to impaired prostaglandin-mediated blood flow leads to carcinogenesis.

Choose the correct option ?

A. Both A and R are true, and R is the correct explanation

B. Both A and R are true, but R is not the correct explanation

C. A is true, but R is false

D. A is false, but R is true

Answer -- Both A and R are true, but R is not the correct explanation.

- Classical analgesic nephropathy (especially phenacetin-related):
  - Associated with ↑ **risk of urothelial carcinoma** (renal pelvis, ureter, bladder)
- Mechanism:
  - Chronic exposure to **toxic metabolites**
  - Carcinogenic potential of phenacetin derivatives Papillary necrosis involves:
- Papillary necrosis involves:
  - **Medullary ischemia**
  - Contribution of **prostaglandin inhibition**
- **!** However:
  - This explains **papillary injury**, NOT **carcinogenesis**

☞ No direct causal link

“Thank you”