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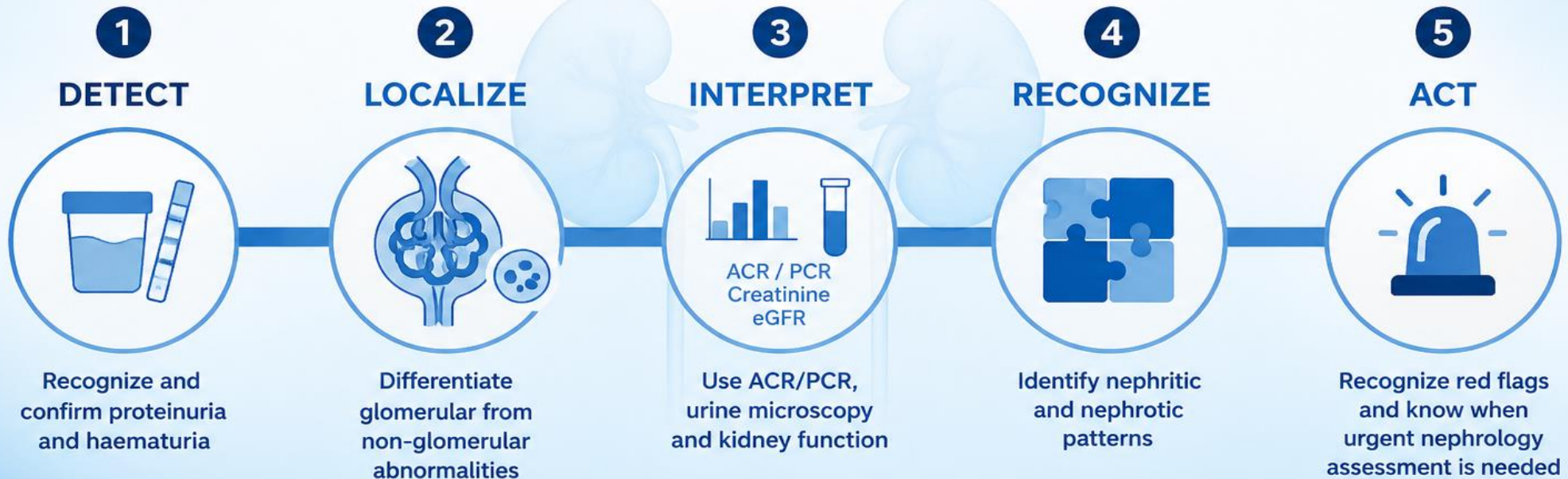
Approach to the Patient with Proteinuria and/or Haematuria
From an abnormal urinalysis to a clinical diagnosis

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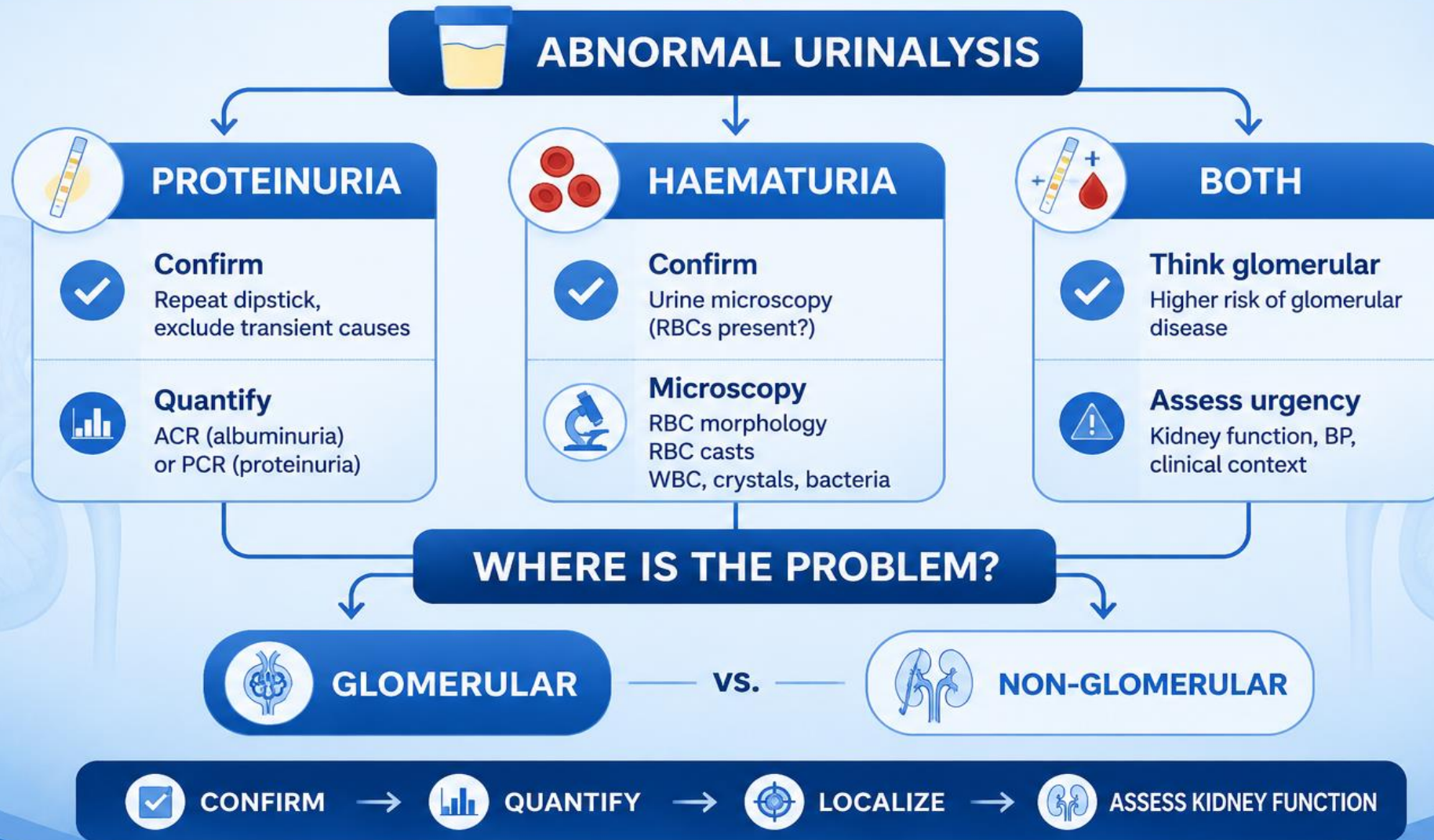
Approach to the Patient with Proteinuria and/or Haematuria

BY THE END OF THIS SESSION, YOU SHOULD BE ABLE TO:

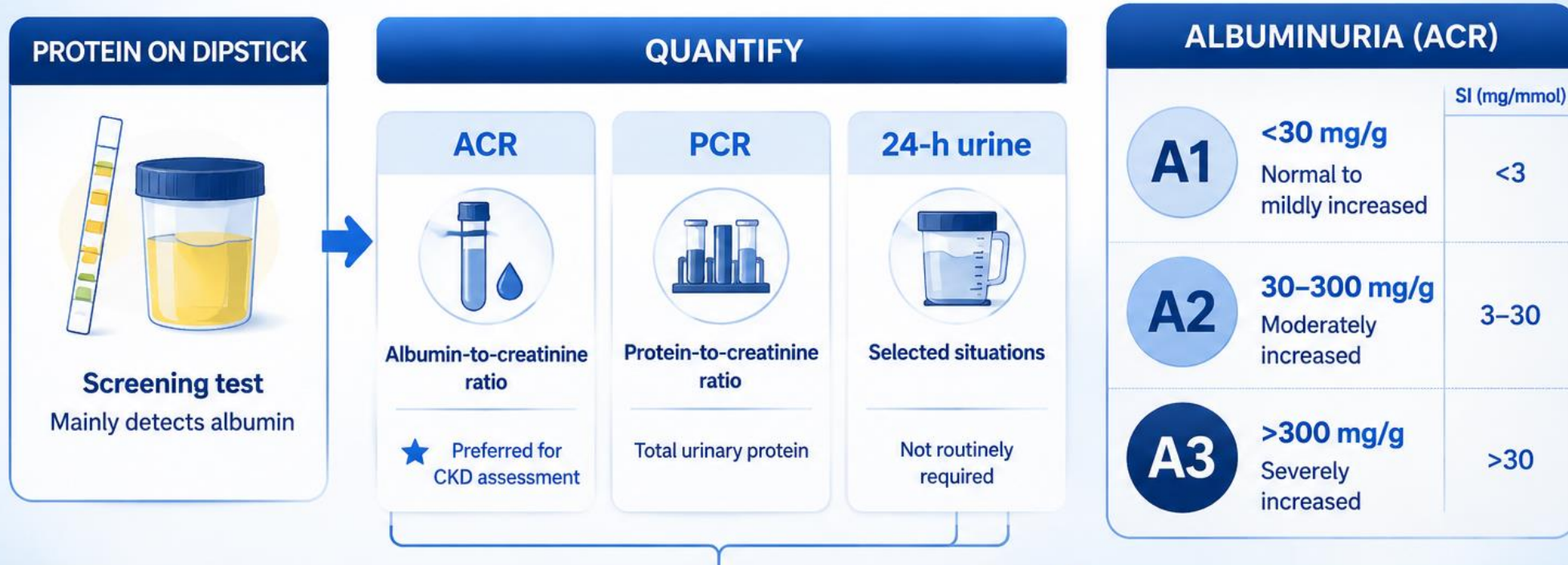


Proteinuria and haematuria are findings – not diagnoses.

Start with the urine



Proteinuria: what are we actually measuring?



A positive dipstick tells you that protein may be present.
ACR tells you how much albumin is being lost.



CLINICAL PEARL

Negative dipstick ≠ no proteinuria

Dipsticks may miss non-albumin proteins, e.g. monoclonal light chains.



Detect
(dipstick)



Quantify
(ACR/PCR)



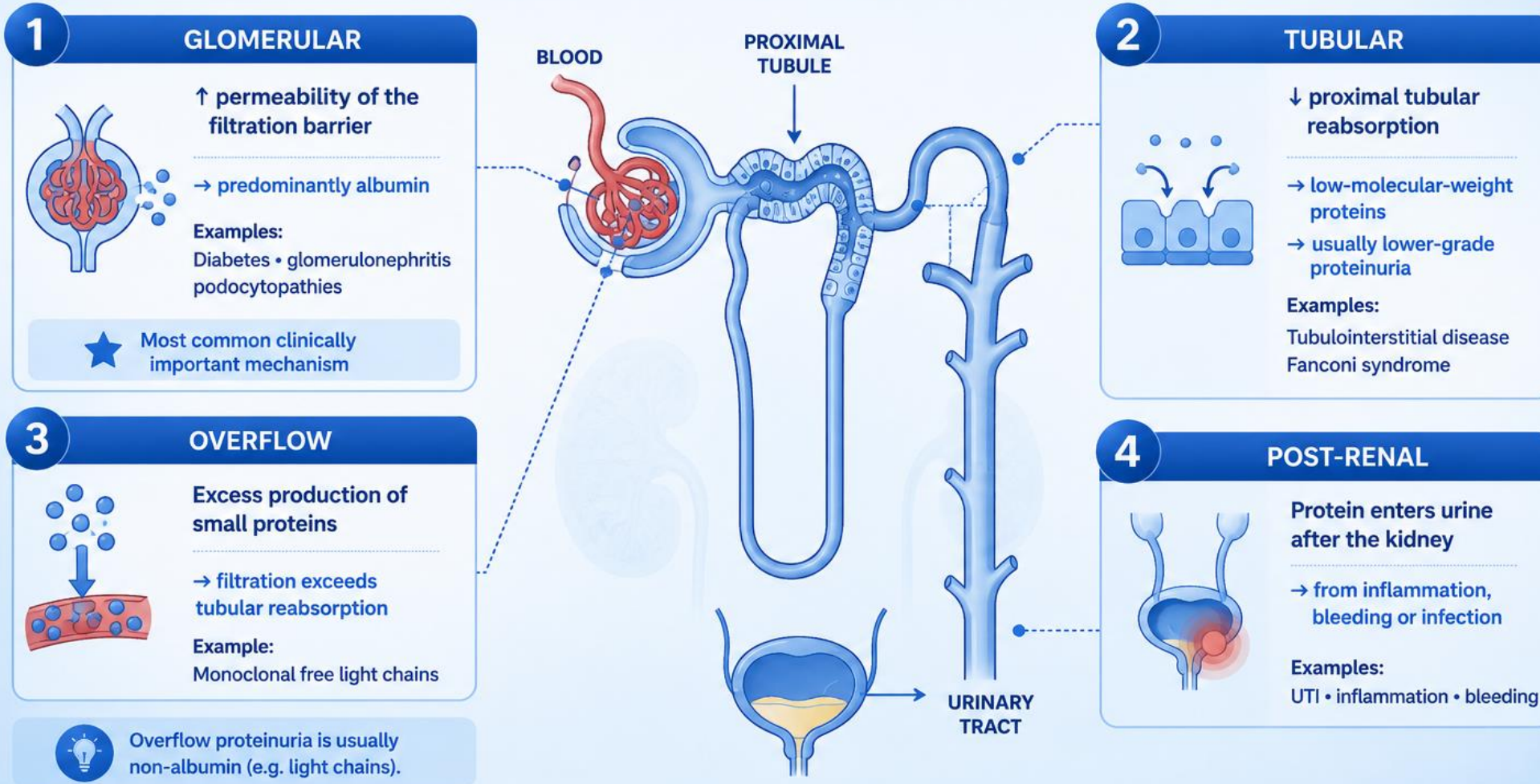
Localize
(source)



Assess
(kidney function, BP, context)

Where does proteinuria come from?

Proteinuria can arise from different sites along the nephron or the urinary tract.

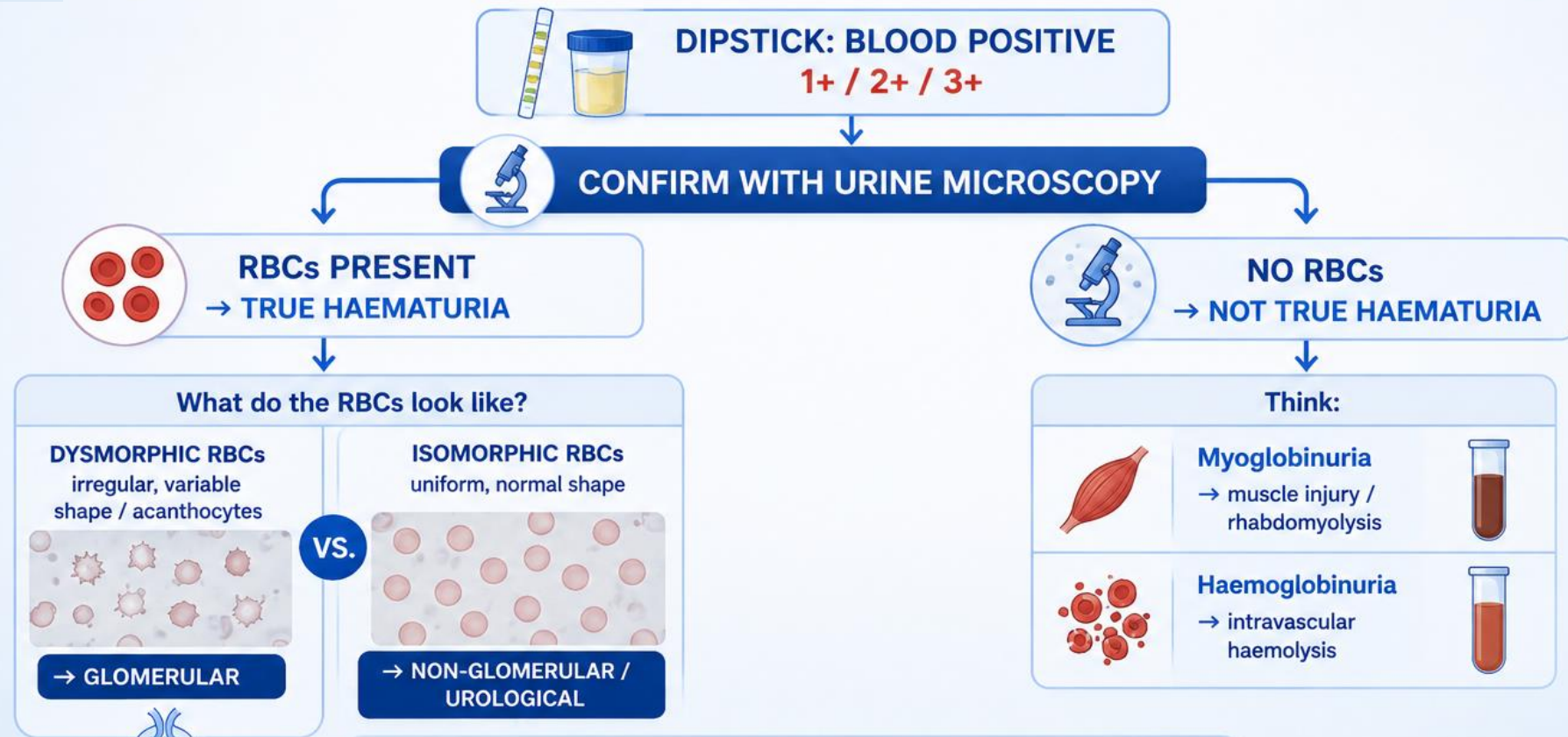


Proteinuria ≠ glomerular disease



Ask: albumin or other proteins – and where are they coming from?

Haematuria: Is it really blood?



KEY POINTS

- ✓ Dipstick + blood ≠ haematuria
- ✓ Microscopy confirms and helps localize
- ✓ RBC casts = glomerular origin



Dipstick detects “blood” → microscopy tells you whether RBCs are actually present and helps localize the source.

Recognize the Pattern: Nephritic vs Nephrotic

Two major patterns of glomerular disease

NEPHRITIC

Think: **INFLAMMATION**



Haematuria
dysmorphic RBCs



Active urine sediment
RBC casts



↓ GFR / AKI
rising creatinine



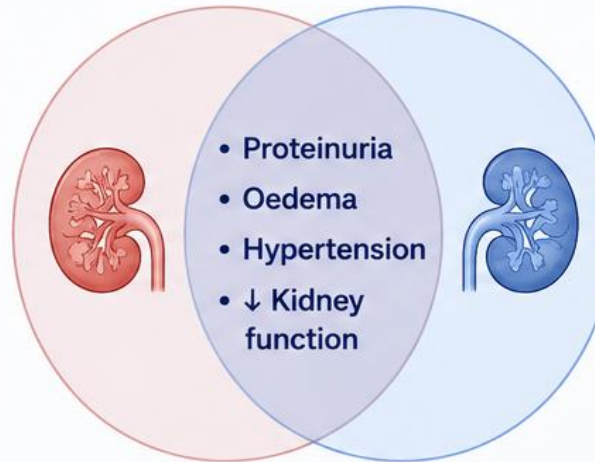
Hypertension ± oedema

Proteinuria is present —
usually not the dominant feature



**Blood + active sediment +
impaired kidney function**

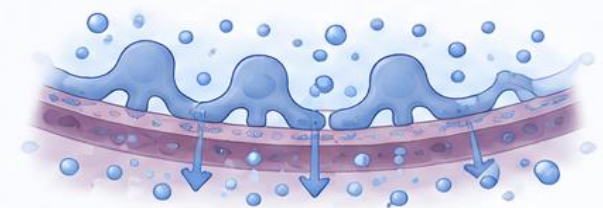
OVERLAP EXISTS



**These are patterns,
not rigid categories.**
Features may coexist.

NEPHROTIC

Think: **PROTEIN LOSS**



Heavy proteinuria
>3.5 g/day
(classical definition)



Oedema



Hypoalbuminaemia



Hyperlipidaemia / lipiduria



↑ risk of thrombosis and infection



**Protein loss + hypoalbuminaemia +
oedema**



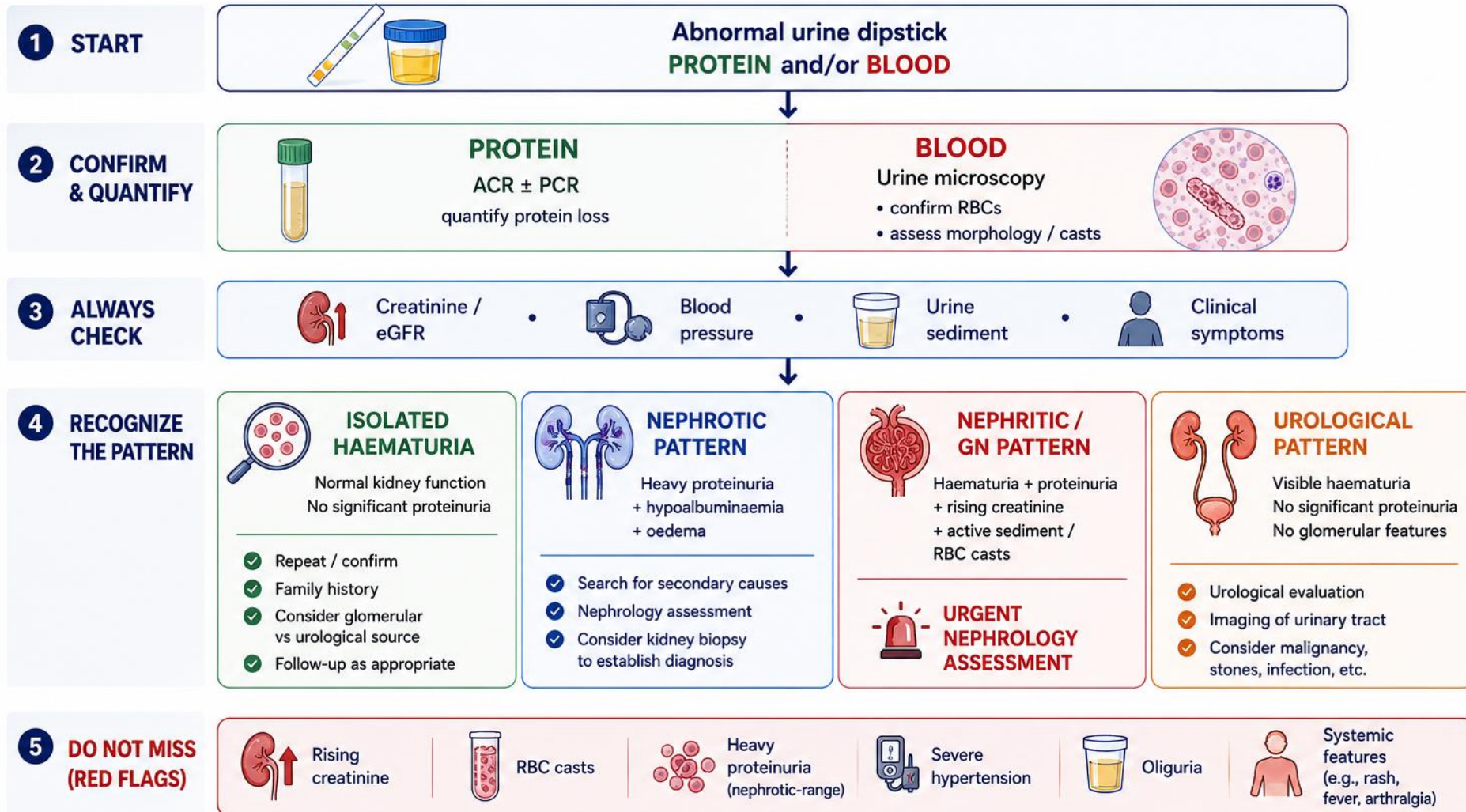
Don't start with the disease name.

Start by recognizing the pattern.

What dominates: inflammation and haematuria — or heavy protein loss?

PROTEINURIA AND/OR HAEMATURIA – A PRACTICAL APPROACH

From dipstick to clinical decision



KEY MESSAGE: Don't diagnose the dipstick – diagnose the patient.



TAKE-HOME MESSAGES

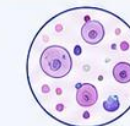


A few key points to remember



1. Confirm and quantify

Do not rely on dipstick alone. Confirm haematuria with microscopy and quantify proteinuria (ACR/PCR).



2. Recognize the pattern

Different patterns (isolated haematuria, nephrotic, nephritic, or urological) lead to different diagnoses and management.



3. Look for red flags

Rising creatinine, active urine sediment, heavy proteinuria, nephrotic syndrome, severe hypertension, oliguria, systemic features. These patients need timely or urgent evaluation.



4. Think beyond the kidneys

Not all haematuria is glomerular. Visible haematuria without glomerular features → consider urological causes.



5. Don't diagnose the dipstick – diagnose the patient

Always integrate the urine findings with clinical context, kidney function and the whole picture.



Thank you for your attention!
Any questions?

