



ECNG

Extracorporeal Nephrology Group

An Academic Forum for Nephrologists, DNB Trainees,
Physicians, and Healthcare Professionals

ANNOUNCEMENT



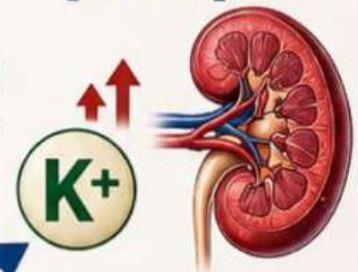
“ Knowledge grows when shared, wisdom deepens when discussed ”



CARDIORENAL SYNDROME (CRS) and **HYPERKALEMIA**

The Dangerous Triad Affecting Outcomes

In CRS, impaired kidney function, RAAS inhibitors, and other factors reduce potassium excretion, leading to hyperkalemia and worse outcomes.



WHY HYPERKALEMIA OCCURS IN CRS



Reduced renal potassium excretion
↓ GFR, ↓ distal sodium delivery,
↓ aldosterone effect



RAAS inhibition
ACEi, ARB, ARNI, MRAs (spironolactone,
eplerenone, finerenone) reduce aldosterone
→ lower K⁺ excretion



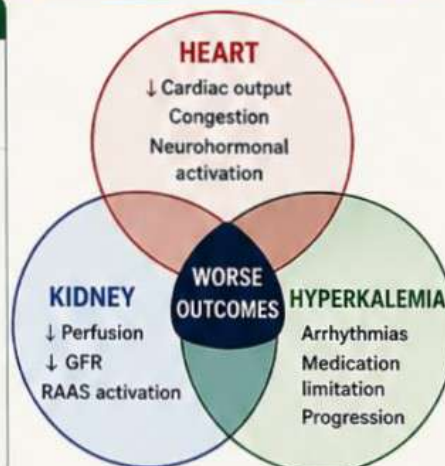
Diabetes mellitus
Hyporeninemic hypoaldosteronism (Type 4 RTA),
insulin deficiency/resistance → K⁺ shift out of cells



Heart failure
↓ Renal perfusion, venous congestion,
neurohormonal activation, AKI episodes



Concomitant medications
NSAIDs, trimethoprim, heparin,
β-blockers, calcineurin inhibitors, etc.



Break the cycle to improve outcomes

RISKS & CONSEQUENCES



Life-threatening arrhythmias and sudden cardiac death



Increased hospitalizations



Limitation or discontinuation of life-saving RAAS inhibitors and MRAs



Faster progression of CKD and heart failure



Higher morbidity, mortality, and costs

Potassium Levels (mmol/L)

● 5.0 – 5.4	Mild
● 5.5 – 5.9	Moderate
● ≥6.0	Severe
● ≥6.5 or ECG changes	Medical emergency

MANAGEMENT STRATEGIES

Identify & Treat Reversible Causes



- AKI, dehydration
- Metabolic acidosis
- High K⁺ intake
- Constipation
- Drug review

Continue Guideline-Directed Therapy



Avoid stopping RAAS inhibitors unnecessarily.
Use strategies to control K⁺.

Dietary Advice



Restrict high-K⁺ foods.
Avoid K⁺ containing salt substitutes.

Optimize Diuretics



Loop diuretics (furosemide, torsemide).
Add thiazides if appropriate.

Correct Acidosis



Sodium bicarbonate in CKD patients with metabolic acidosis.

Potassium Binders (Chronic Control)



- Patiromer
 - Sodium zirconium cyclosilicate (SZC)
- Help maintain RAASi and MRA therapy.

Emergency Treatment



- IV calcium
- Insulin + glucose
- Nebulized salbutamol
- Sodium bicarbonate (if acidosis)
- Diuretics / Binders
- Dialysis (if needed)



ZOOM MEETING



DATE
27/7/26
(Monday)



TIME
9:00 PM –
10:00 PM

NO REGISTRATION

Join us directly!



EXPERT
PRESENTATIONS



INTERACTIVE
DISCUSSION



PRACTICAL
INSIGHTS



BETTER OUTCOMES
FOR OUR PATIENTS



**TOGETHER, LET'S BREAK THE VICIOUS CYCLE
BETTER HEART. BETTER KIDNEY. BETTER LIFE.**



Join on Zoom

Let's learn,
share &
advance
together!



<https://ecng.co.in>

You are cordially invited to
**ECNG WEEKLY
ACADEMIC MEETING**
No. 35/2026
'meeting without cancellations'



DATE
27 JULY 2026
MONDAY



TIME
**9:00 PM
TO 10:00 PM**
(IST)



MODE
**VIRTUAL
MEETING**



TOPIC

**MEDICATIONS USED IN
HEART FAILURE THAT
CAUSE HYPERKALEMIA –
PREVENTION &
MANAGEMENT**

QUESTIONS & ANSWERS

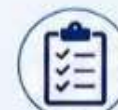
- | | | | | |
|----------|--|----------|---|---|
| 1 | Which class of drugs used in heart failure most commonly causes hyperkalemia? | ? | Answer:
RAAS inhibitors (ACE inhibitors, ARBs, ARNI), MRAs, and potassium-sparing diuretics. | ✓ |
| 2 | What is the threshold level of serum potassium at which RAAS inhibitors should be reduced or withheld? | ? | Answer:
If $K^+ > 5.5$ mEq/L – reduce dose or withhold.
If $K^+ > 6.0$ mEq/L – stop and treat urgently. | ✓ |
| 3 | Name two strategies to prevent hyperkalemia in patients on RAAS inhibitors. | ? | Answer:
Dietary potassium restriction and use of loop diuretics; use of potassium binders (patiromer/sodium zirconium cyclosilicate) when needed. | ✓ |
| 4 | Which potassium binder can be used chronically in heart failure patients to allow continuation of RAASi? | ? | Answer:
Patiromer or sodium zirconium cyclosilicate can be used chronically. | ✓ |
| 5 | How frequently should serum potassium be monitored after starting or up-titrating RAAS inhibitors or MRAs? | ? | Answer:
Check within 1 week, then at 2–4 weeks, then periodically (every 1–3 months). | ✓ |



RISK
FACTORS



MONITOR
 K^+



PREVENTION



MANAGEMENT



Let's learn together, discuss, and excel in Nephrology! — *Knowledge saves kidneys.*



For DrNB & DM Nephrology PGs
Enhance knowledge. Excel in practice.