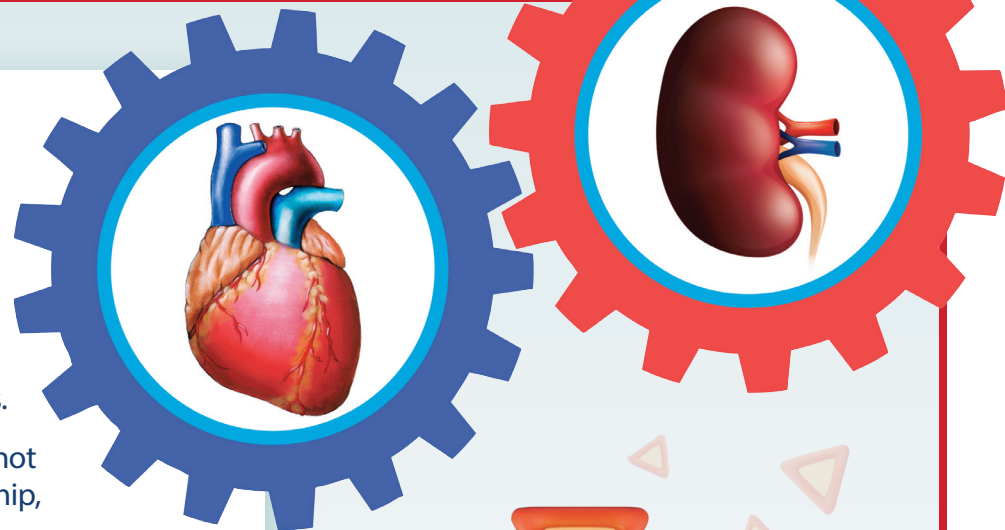


Understanding the Heart Failure + Kidney Link

Why do Kidney Disease and Heart Failure Go Together?

The kidneys and the heart are intrinsically linked, which can have both positive and negative consequences for the body. When both organ systems are working together, they form a well-coordinated and efficient partnership that helps maintain circulatory homeostasis.

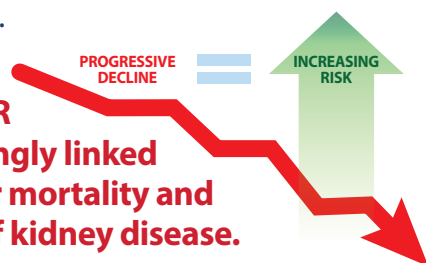
While the numerous pathways linking the heart and kidneys are still not fully understood, it's evident that they have an antagonistic relationship, where multiple issues can impact their function.



Interpreting and Managing eGFR Variability

Estimated glomerular filtration rate variability in heart failure is driven by hemodynamic changes and medications.

A greater eGFR decline is strongly linked to both higher mortality and progression of kidney disease.



In managing eGFR variability be prepared for:

Mild changes during guideline-directed medical therapy (GDMT) optimization

A decrease in eGFR of up to 20%-30% may be acceptable if the patient remains clinically stable

An approximate 20% decline warrants closer monitoring and follow-up

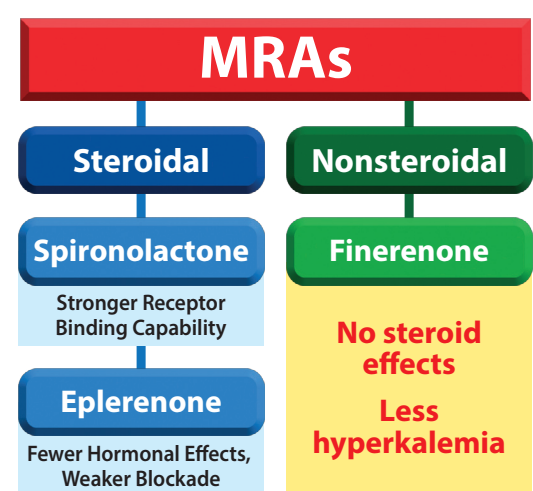
Dose reduction or temporary discontinuation of GDMT should be considered in patients with a $\geq 30\%$ decline

Use of Nonsteroidal Mineralocorticoid Receptor Antagonists in HFmr/pEF

Pathologic increases in aldosterone are detrimental to cardiovascular and kidney health as they promote fibrosis, inflammation, and hypertension.

MRAs block the effects of aldosterone and can slow progression and improve cardiovascular outcomes.

Nonsteroidal MRAs represent a newer generation of MRAs that reduce cardiovascular death and worsening HF events in patients with HFmrEF and HFpEF, while offering an improved safety profile compared with traditional steroidal MRAs. These agents should be considered one of the pillars for treating these patients.



Multimorbid Nature of the HFmr/pEF Patient

Cardiovascular-kidney-metabolic (CKM) syndrome is a multi-faceted systemic disorder that is defined by pathophysiological interactions among metabolic risk factors, chronic kidney disease, and the cardiovascular system. HFmrEF and HFpEF are clinical manifestations of CKM syndrome. Contemporary trials show that targeting metabolic, renal, and inflammatory pathways can improve outcomes across the heart failure spectrum.

The paradigm shift for practitioners is clear: treat the system, not just the ventricle.

Metabolic Risk Factors Associated with CKM Include:



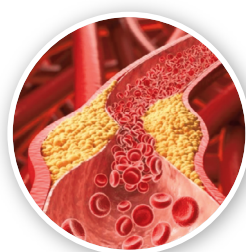
Obesity



Insulin Resistance



Hypertension



Dyslipidemia

