

One Heart, Two Kidneys, Three Pearls

- By Narendra Singh, MD

Chronic kidney disease (CKD) affects 1 in 7 US adults. Many of the risk factors that cause heart disease also affect the kidneys such as diabetes and high blood pressure. Infections, kidney stones, autoimmune disorders and inflammation all contribute to kidney damage. The net effect of chronic injury to the kidneys is end stage renal disease (ESRD) that results in the need for dialysis or a renal transplant. Both events are life changing. CKD is also a major risk factor for heart disease which in turn is the leading cause of death in this patient population. Sadly 9 out of 10 people with CKD are unaware of their disease. Not surprisingly prevalence increases with age. Fortunately, there are things you can do to protect your kidneys.

1. STAY HEALTHY

Regular exercise especially aerobic activities improve kidney function. Controlling your sugar intake to prevent diabetes or prediabetes is very important. Monitoring your blood pressure, eating a low salt diet and drinking plenty of fluids

will protect kidney function. Water helps clear sodium and toxins from the body and reduces the risk of painful kidney stones. Avoid smoking and be careful of using too many over the counter medications such as NSAIDs (ibuprofen and naproxen) which can damage the kidneys.

2. MONITOR REGULARLY

Kidney health is measured in two simple ways. The first is a blood test that tells you about kidney function - your estimated GFR (glomerular filtration rate). An eGFR of greater than 90 is normal, under 60 represents stage 3 kidney disease, under 30 is stage 4 while under 15 is stage 5 and usually means a need for dialysis. The second test is a urinalysis that tells you about kidney damage by measuring the amount of protein being spilled in the urine UACR (urine albumin to creatinine ratio). Less than 30 is acceptable while greater than 300 is indicative of significant kidney damage. Based on these results your health care providers can offer additional testing such as ultrasounds, CT, MRI or even biopsies and cystoscopy.

3. CHOOSE DRUGS WISELY

The first step is to avoid drugs or supplements that can damage the kidneys. Always talk with your pharmacist or doctor when starting a new medication. Diuretics are used to relieve the fluid retention seen in kidney disease but should be used sparingly as they can damage the kidneys. In diabetic patients, two classes of medications have been shown to protect the kidney. The first are ACE inhibitors (such as lisinopril and ramipril) or an ARB (such as losartan or valsartan). After that a new first in class drug finerenone (Kerendia) can protect both the heart and kidneys. For many patients with CKDincluding those without diabetes, the use of an SGLT2 inhibitor can not only protect the kidneys but improve overall survival! These drugs include dapagliflozin (Farxiga), empagliflozin (Jardiance) and canagliflozin (Invokana). All these therapies require close monitoring and guidance

Heart and kidney disease can both have devastating consequences. I'm hoping these three pearls will help you save two kidneys, one precious heart and a wonderful you.

NARENDRA SINGH, MD,

FRCP(C), FACC, FAHA

Preceptor- Mercer University, Atlanta, GA
Director, Clinical Research, NSC Research, Atlanta, GA
Director, Canadian Collaborative Research Network
Affiliated with Piedmont, Northside and Emory Health
Systems

1100 Northside Forsyth Dr, Suite 345, Cumming, GA, USA, 30041, Phone 678-845-8960 5400 Laurel Springs Parkway, Suite 1401, Johns Creek, GA, 30024 Phone 678-208-0165

Email-DrSingh@nscresearch.org or DrSingh@nsccardiology.com www.heartdrsingh.com