**AFIB AND CKD**

**WHAT YOU NEED TO KNOW ABOUT STROKE PREVENTION**

**WHAT ARE THEY?**

- **Afib (atrial fibrillation)** is a type of irregular heartbeat, or arrhythmia. Afib is the most common type of arrhythmia. Sometimes Afib can come and go without intervention (paroxysmal), while other times it can be more permanent (chronic or long standing).

- There are two types of Afib. One is caused by a heart valve problem, called valvular Afib, and one that is not, called nonvalvular Afib (NVAF). NVAF is more common.

- Signs and symptoms of Afib can include fatigue, chest pain, a rapid or fluttering heartbeat, dizziness, and shortness of breath.

- **Chronic kidney disease (CKD)** is a loss of kidney function that happens gradually, and has been present for 3 or more months. It is usually not reversible.

- In CKD, the kidneys become less able to perform many vital functions, including removing wastes from the body, balancing the body's fluids, regulating blood pressure, producing red blood cells, and maintaining healthy bones.

**WHAT ABOUT STROKE RISK?**

- Afib is a common risk factor for stroke. Some people with Afib may not feel symptoms, but they are still at risk.

- Afib causes improper blood flow, which can raise the risk of a clot to form. Clots are important for your body to stop bleeding from cuts, but clots forming in the heart or blood vessels can cause stroke. If a clot or piece of a clot breaks loose and travels to the brain, then blood flow to specific areas of the brain can become blocked or restricted. This can result in a stroke, which can have very serious health consequences.

- CKD is another condition that increases the risk of stroke. As the blood filtering units of your body, your kidneys are prone to problems with blood flow and blood vessels. CKD has also been linked with Afib. People with CKD are at higher risk for Afib and stroke.

**HOW ARE THEY TESTED?**

- Afib is evaluated by performance of a physical exam and EKG (electrocardiogram), or heart rhythm tracing. Your medical and family histories will also be reviewed, and other tests will check how well your heart functions (echocardiogram or ECHO).

- CKD is diagnosed by a urine test to detect protein (albuminuria) and blood (hematuria). Blood tests can check levels of protein and waste products. Glomerular filtration rate (GFR) is a blood test that checks how well the kidneys are filtering. If needed, a kidney biopsy can help confirm CKD.

**HOW ARE THEY TREATED?**

- Afib is treated in two ways:
  - Rate control: using medications to control heart rate
  - Rhythm control: using medication or specific cardiac procedures to prevent Afib.

- Controlled use of a small electric shock, or cardioversion, can be used to correct, or convert, the heart rate.

- People with NVAF can also take medicines, called anticoagulants, which are used to help prevent harmful blood clots that can cause a stroke.

- Both Afib and CKD are linked with high blood pressure, high cholesterol, and high blood sugar (diabetes), all of which can increase the risk of a stroke. These conditions are managed through more physical activity, a modified diet, and medications.
Eat healthier foods. Control your intake of sugar and fat, be more physically active, and get regular exercise. See a healthcare professional to discuss which dietary and lifestyle changes might be best for you, and to address any medical conditions.

Manage blood pressure. Control your intake of salt.

Lose weight if you are overweight. Obesity can lead to other conditions such as high blood pressure and diabetes, which can hurt the kidneys and heart.

Avoid overuse of non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen and naproxen, which can harm kidneys.

Avoid herbal supplements. Many herbal products can harm the kidneys.

Avoid smoking. Smoking increases the chance of heart disease and stroke.

Take all medicines as instructed by your doctor, and do not miss any appointments. As soon as you have any problems, let your doctor know.

Understand the risks and benefits of any treatment. Your doctor may need to change the amount of certain drugs you take in order to keep the right levels in your blood at all times.

Understand the risks and benefits of anticoagulants. Anticoagulants can be very helpful in preventing harmful clots, but they may also carry a risk of preventing helpful clots (such as clots that stop a cut from bleeding), and this can increase the risk of bleeding too much, even from small breaks in your skin. With some anticoagulants you may need to get a special blood test on a regular basis to make sure they are helping you, and you also need to watch your intake of certain foods. Some anticoagulants may have different risks of bleeding. Each type of anticoagulant may have different effects on stroke prevention. If you are on dialysis, the risks and benefits of anticoagulants will need to be carefully considered by your doctor, especially if you have a very high risk of stroke. Talk to your doctor about any new drugs, treatments, and research that can help with your disease, and which treatment might be best for you.

Know the signs and symptoms of Afib, which include fatigue, chest pain, palpitations or a rapid or fluttering heartbeat, dizziness, or shortness of breath. Contact your healthcare professional if you experience any of these symptoms.

Know your GFR and ACR if you have CKD.

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**CKD TRACKER**

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