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| **Factor** | **Mechanism** |
| Hypertension | Left ventricular hypertrophy, frequently due to hypertension, can cause heart failure and myocardial fibrosis each predisposing to AF. |
| Heart failure | This is a substrate for the development of AF through atrial dilatation, fibrosis and electromechanical remodeling. |
| Vascular disease | Peripheral, cerebral and coronary artery disease are associated with an increased risk of AF. |
| Diabetes mellitus | Often associated with vascular disease, and thus the risk of AF, diabetes mellitus is also associated with autonomic imbalance and therefore AF. |
| Urea and electrolyte imbalance | Uremia and hyperparathyroidism are associated with myocardial fibrosis, which is arrhythmogenic. Dialysis induced ischemia and abnormal pre-dialysis potassium are associated with AF. Dysregulation of intracellular calcium flux also predisposes to AF. |
| Autonomic imbalance | Heightened sympathetic activity is common in CKD which, in turn, predisposes to AF. |

**Table 1.** Why does CKD predispose to AF?