JAC2-1 Management of Arrhythmia and SCD in Hemodialysis Patients

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Patients on maintenance HD are at increased risk for dysrhythmias, cardiac arrest, and SCD. HD patients with underlying structural or functional cardiovascular disease are at much higher risk for these dysrhythmias and cardiac arrest because of increased dysrhythmogenicity due to dynamic changes in electrolytes, volume status, blood pressure and the use of multiple medications. IHD is present in many patients even at the time of HD. HD patients with either symptomatic or asymptomatic CAD are at increased risk for dysrhythmias and SCD. AF is perhaps the most commonly diagnosed dysrhythmia in the HD patients. AF was reported in 27.0% of HD patients, and associated with IHD, dilated cardiomyopathy, acute pulmonary edema, valvular disease, and older age. The use of carvedilol or telmisartan reduced morbidity and mortality in dialysis patients with dilated cardiomyopathy. A small study demonstrated that HD patients may not tolerate sotalol due to an increased risk of torsade pointes. In HD patients, ICD therapy is apparently underused. ICD implantation in cardiac arrest survivors on dialysis is associated with greater survival. Warfarin use among patients with both HD patients and AF associates with an increased risk for stroke. The risk is greatest in warfarin users who do not receive in-facility PT-INR monitoring. Moreover, the use of high dose of warfarin accelerate the potential risk of metastastic calcification in HD patients with elevated serum Ca and phosphate.

Keywords: SCD, atrial fibrillation, warfarin