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Quality Corner – CHF

Practical Points in Outpatient CHF Management

Hospital readmission (within 30 days) after congestive heart failure is a disappointing and unfortunate occurrence which happens in 9-10% of patients. These patients have worse outcomes at six months and readmission rates are important quality markers with reimbursement implications for all involved. Risk factors for CHF readmission include psychosocial factors, AIDS, renal failure, diabetes and longer index hospitalization. The strive for minimizing hospital stay leaves more of a burden on the outpatient arena. Close follow up and education of the patient after a recent hospitalization with CHF is key to minimizing re-hospitalization, particularly in complicated patients. Close communication between primary care, cardiology and nephrology are mandatory. The aim of outpatient care is to examine the degree of congestion or over diuresis while fine-tuning the medications.

Patients should be seen one week after hospitalization. A thorough review of the hospital course and medication reconciliation is necessary. The physician should assess the degree of fluid overload, euvolemia or hypovolemia (based on symptoms, physical examination, serial renal function and BNP. It is important to remember that the BNP is a part of the whole clinical picture and not a single predictor of outcome by itself. It is helpful when it is normal to reassure us that the patient is not in worsening failure and symptoms of dyspnea or lower extremity edema may be related to something else. BNP is often mildly elevated in patients with dilated cardiomyopathy who are euvolemic or sometimes hypovolemic.

Adjustments to the medications should be first aimed at blood pressure control ensuring maximal afterload reduction, preferably with Entresto, and if not possible with ACE or ARB. The doses of these medications should be titrated up as much as can be tolerated. Beyond that, persistent hypertension can be treated with beta blockers or hydralazine.

Beta blocker therapy, preferably with Carvedilol, should also be maximized, particularly if the heart rate is elevated. Patients with lower BP may tolerate Metoprolol over Carvedilol. I favor maximizing beta blockers over maximizing Entresto for ACE/ARB therapy as long as patients are taking both. Patients with atrial fibrillation will benefit from cardioversion if there is a reasonable chance of nonrecurrence. The risk of concomitant antiarrhythmic therapy should be weighed against the risk of keeping the patient in atrial fibrillation with controlled rate.

Diuretic therapy with loop diuretics with or without Metolazone for severe cases should be tailored based on the patient's volume status and renal function. Patients with low LVEF should be on Spironolactone. Electrolytes should be closely monitored, especially with concomitant ACE/ARB therapy. In patients with advanced congestive heart failure, the high renal venous pressure worsens renal function and this may improve with diuresis. Sometimes, in patients with advanced heart failure, one is compelled to find a fine balance between some degree of congestive heart failure, and elevated creatinine and some degree of hypotension.

Typically, patients with low LVEF should have had electrophysiology consultation for potential ICD placement, and ones with LBBB may benefit from biventricular pacing. Evaluation and treatment of ischemic heart disease and valvular disease may be needed.

Studies have shown that home health visits by experienced personnel can reduce rehospitalization, with close monitoring of weight, BP, heart rate, renal function and BNP levels. Patient education (condition diet, medication, warning signs) by home health and the physician's office is mandatory. The physician should not hesitate from seeing patients closely once every one to two weeks initially and then every four to six weeks before seeing them every three months. As telehealth becomes more prominent and acceptable, the doctor may be able to assess the patient with the aid of an experienced nurse with fewer visits to the clinic.