VALLEY MEDICAL GROUP
Prevention & Medical Care To Help You Live Better, Longer.

Clinical Champion Update

Date: 9/23/19 Subject: Congestive Heart Failure

Since our initial guidelines and experience in 2016, ongoing research has allowed for some fine-tuning of guidelines and some new recommendations. Many of these are more relevant to inpatient or tertiary specialty providers and programs, but we should at least be aware of what procedures our patients may be offered or what meds they might be taking when returning to us.

Most of this information is gathered from live conferences I have attended in the last year, and from UpToDate.

First of all, it is important to remember that CHF, whether with reduced or preserved ejection fraction, is the end result of conditions we see and address every day---hypertension, coronary artery disease, afib, obesity, sleep apnea and other pulmonary disorders etc. So we have opportunities for prevention, as well as long term management.

It is always important to assist patients with smoking cessation, dietary sodium (<3000mg/day) alcohol restrictions, weight loss, exercise (cardiac rehab if available), medication compliance and self- management. Remember, your health center nurses (especially anticoagulation clinic staff) can help coach and teach patients over the phone, and they have a diuretic titration guideline to help make medication changes when needed. Case management staff also does a lot of teaching and can even make house calls to help with medication regimens, etc. Their role post hospital is vital in preventing re-admissions, as patients struggle prior to seeing VNA or us, after getting home.

In re: HFrEF (heart failure with reduces ejection fraction)--- please see appended 2017 AHA guidelines for pharmacotherapy. Also, not sure how helpful it is, but there is an algorithm in UpToDate called “Heart Failure: Initial Pharmacologic Therapy And Dose Titration for Compensated HFrEF”.

Of all the medication interventions, the greatest survival benefit is from beta blockers. Once this, and ACEI (or ARB) also in place, and the proper criteria are met, then the choice is either to add aldosterone antagonist (i.e. Spironolactone or Epleronone) OR switch out the ACEI (or ARB)

for a combination ARB with neprilysin inhibitor (ARNI)--- band name Entresto. The former is inexpensive, covered by many insurances, and requires that the baseline K <5 and Crcl > 30, and will require short term f/u K+. The latter is costly, not always covered, requires SBP > 100, good stable volume status, and there must be at least 36hr off ACEI (or ARB) before it is started. Anecdotally, cardiology has tried to do this in a few of my patients, always with resulting hypotension and azotemia requiring discontinuation within 2 weeks.

Another newer medication to consider is Ivabradine, which is like a beta blocker without any blood pressure lowering. It is useful when the heart rate remains over 70 despite maximally tolerated beta blocker, and the baseline BP is low. I have no experience with this med.

Recommendation re: the Alternative use of hydralazine + nitrates (especially in AA patients Class III-IV), ICD and CRT, transplant and other higher level interventions remain the same.

Of note, data shows outcomes of CHF associated with rapid Afib are better with ablation therapy than meds. Patient with acute or symptomatic progressive MR can benefit from mitral clip and no longer necessarily need major surgery. There is also a new treatment for HFpEF associated with LVH due to amyloid. Pretty rare right? Actually, it turns out that amyloid deposition in the heart is found in 25% of all males over the age of 85, and about 15% of HFpEF admission with LV thickness <12mm is due to amyloid deposition. This “wild type TTR” amyloid is found almost exclusively in men over 60, and other common conditions for these people are Afib, Carpal Tunnel Syndrome, and Spinal Stenosis.

For the warm months especially, remember that the people with HFpEF (stiff ventricles and tiny intracardiac volumes) need to keep their tanks full to maintain ejection fraction, so decrease or hold diuretics (always avoid nitrates and careful with CCB) or risk inducing subaortic stenosis, weakness, dizziness, syncope and prerenal azotemia. Your CHF patients warrant just as much, if not more, monitoring than your simple uncontrolled hypertensive, so BMP and visits q3mo at least.

I have also combined 2 reference lists from UpToDate re: “Factors Potentially Contributing to Worsening Heart Failure”, some drugs to avoid, and should be appended. This is posted in the Clinical Guidelines section on the Intranet page.

Any questions, feel free to fire off a Spark, email, or call/text to 413-522-4942, or contact Ben Woodard (also at GHC).

Sincerely,

Pat Iverson MD

CHF Clinical Champion