3MinuteExtraMile™ Educational Series

Asymptomatic Heart Failure and Diabetes: Pharmacists Call to Action

Our June newsletter focused on the American Diabetes Association consensus statement on heart failure published in Diabetes Care, June 2022. Key takeaways from that statement include:

- People with pre-diabetes, type 1, and type 2 diabetes have a two to four-fold increase in the risk of heart failure (HF).
- Heart failure Stages A and B are asymptomatic and, if left untreated, can progress to overt symptomatic HF, Stages C or D.
- At least yearly testing with natriuretic peptides or high sensitivity cardiac troponins is recommended for people with diabetes to assess changes in status over time.
- In people with diabetes, treatment using heart failure–specific guideline-directed therapy is recommended for hypertension, lipid disorders, and diabetes control and includes lifestyle interventions.

Focus on people with diabetes and HF Stages A or B

Reducing the incidence of new onset or worsening HF first involves addressing risk factors including hypertension, dyslipidemia, obesity, alcohol intake, and smoking, as well as maintaining adequate glucose control.

Intensive lifestyle intervention is recommended concomitantly with other treatments, and Social Determinants of Health (SDOH) should be considered in the decision-making process. People with type 1 and type 2 diabetes are equally susceptible to HF but will have different treatment strategies. This article speaks mainly to people with type 2 diabetes. Guidelines for treatment of heart failure stages C and D are available in the references listed below under guidelines and updates.

Stage A

- Stage A is asymptomatic with no detectable damage to the heart or elevated biomarkers.
- Reducing the impact of risk factors is paramount.
- Manage hypertension with angiotensin-converting enzyme inhibitors (ACEi) or angiotensin receptor blockers (ARB).
- Manage lipids with statins if indicated.
- Manage glucose with sodium-glucose cotransporter-2 inhibitors (SGLT2i), glucagon-like-peptide-1 receptor agonists (GLP-1 RA), or metformin as first choices.

Stage B

- Stage B, known as “pre-heart failure,” is asymptomatic and defined by the presence of one of the following: structural heart damage, abnormal cardiac function, or elevated

biomarkers such as BNP, NT-proBNP, or high sensitivity cardiac troponins.

- Use of an ACEi, ARB, or thiazide diuretic is preferred over a calcium channel blocker for treatment of hypertension.
- Initial glucose management choices are an SGLT-2i, with or without a GLP-1 RA, and metformin.

Other considerations

- In HF stages B, C, and D, dipeptidyl-peptidase-4 enzyme inhibitors (DPP-4i) are not recommended.
- Thiazolidinediones (TZDs) and sulfonylureas should also be avoided.
- People with stages A or B and chronic kidney disease (CKD) may benefit from the non-steroidal mineralocorticoid receptor agonist (MRA) finerenone, as it slows progression of both CKD and HF.
- In people with Stage B and reduced left ventricular ejection fraction (LVEF), beta blockers can slow progression of heart disease.

The 3-Minute extra Mile

Take 3 minutes to:

- Encourage patients with diabetes who have no symptoms of heart failure to ask their provider about yearly HF testing. Diabetes increases the trajectory of heart failure, so regular testing is imperative.
- Review charts and recommend guideline-directed therapy for early stages of HF.
- Educate patients about the progression of heart disease and how treatment can prolong life and reduce hospitalization.
- Look at the patient's chart to see if they are taking medications that aggravate heart failure such as those mentioned in this article.
- Educate on controlling modifiable lifestyle risk factors using Life's Essential 8.
- Reference the American Diabetes Association (ADA) living guidelines at ADA Guidelines and Updates to find the latest addendum on heart failure.

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