Heart Failure With Preserved EF (HFpEF): Current Management & Treatment

Clinic quick-reference - prioritize objective diagnosis, decongestion, SGLT2 inhibitor therapy, BP/AF control, weight loss, exercise, and comorbidity treatment. LVEF >=50%; if prior HFrEF now >40%, treat as HFimpEF and continue HFrEF GDMT.

Confirm HFpEF - Diagnosis First

- **Required:** symptoms/signs of HF + LVEF >=50% + objective evidence of elevated filling pressures or structural heart disease.
- **Supportive echo/labs:** LA enlargement, LVH, E/e' high, abnormal diastolic indices, pulmonary HTN, elevated BNP/NT-proBNP. BNP may be low with obesity and high with AF/CKD.
- **Useful tools:** H2FPEF or HFA-PEFF score. If unclear but suspicion high: diastolic stress echo or right-heart cath, especially exercise hemodynamics.
- **Do not miss mimics:** CAD/ischemia, valvular disease, amyloid, constriction, lung disease, anemia, renal disease, venous/lymphedema, medication edema.

Core Treatment Priorities

- **1. Decongest:** loop diuretic titrated to euvolemia; avoid chronic under-diuresis and over-diuresis. Track weight, edema, JVP, orthostasis, BMP.
- **2. SGLT2 inhibitor:** empagliflozin 10 mg daily or dapagliflozin 10 mg daily for most symptomatic HFpEF patients, with or without diabetes.
- **3. BP control:** goal generally <130/80 if tolerated. Use ARB/ACEi/ARNI, thiazide-like diuretic, MRA, beta blocker only when indicated.
- **4. Phenotype treatment:** AF, obesity, OSA, CKD/albuminuria, DM, CAD, pulmonary HTN, valve disease, amyloid.

Escalation / Referral Triggers

- **Refer/escalate** for recurrent HF admissions, persistent NYHA III-IV symptoms despite euvolemia, uncertain diagnosis, suspected amyloid/constriction, severe pulmonary HTN/RV failure, complex valve disease, or need for exercise RHC.
- **Hospitalize/urgent eval** for hypoxia, resting dyspnea, syncope, hypotension, AKI with congestion, refractory edema/ascites, rapid AF with HF, or suspected ACS/PE.
- **Patient education:** daily weights; call for 2-3 lb/day or 5 lb/week gain, worsening dyspnea/edema, dizziness, poor intake, or low BP.

Therapy	Typical use / dose	Best fit	Monitoring / cautions
SGLT2 inhibitor empagliflozin or dapagliflozin	10 mg PO daily. No titration. Use regardless of diabetes unless contraindicated.	Most symptomatic HFpEF; strongest HFpEF drug signal for reducing HF events.	Expect small eGFR dip. Hold with prolonged fasting, severe acute illness, ketoacidosis risk, recurrent GU infections. Check renal function per clinic protocol.
Loop diuretic furosemide/torsemide/bumetanide	Dose to achieve euvolemia; torsemide often useful for gut edema or variable absorption.	Congestion, edema, elevated JVP, pulmonary congestion, recurrent weight gain.	BMP/Mg, BP, weights, orthostasis. Avoid “drying out” preload-sensitive small LV/RV dysfunction patients.
MRA spironolactone/eplerenone	Spironolactone 12.5-25 mg daily; titrate cautiously.	Selected HFpEF, especially lower EF range, resistant HTN, recurrent congestion, K low/normal.	Usually avoid/start cautiously if eGFR <=30 or K >=5.0. Recheck K/Cr about 3-7 days, at 1 month, then periodically.
ARB / ARNI losartan/valsartan/sacubitril-valsartan	Use primarily for BP, CKD/proteinuria, CAD risk, and selected HFpEF. Consider ARNI when EF is on lower end of preserved range.	Hypertension-driven HFpEF, LVH, CKD/albuminuria, EF closer to 50%, persistent symptoms.	BMP and BP after initiation/titration. 36-hour ACEi washout before ARNI. Watch K/Cr, hypotension.
Beta blocker / rate agents	Not routine “HFpEF mortality GDMT.” Use when there is a reason: AF rate control, angina/CAD, prior MI, tachycardia.	AF, CAD/angina, prior MI, high sympathetic tone.	Avoid excess bradycardia, chronotropic incompetence, fatigue, hypotension. Consider rhythm strategy when AF drives symptoms.
GLP-1/GIP obesity therapy semaglutide/tirzepatide	For obesity phenotype per obesity/DM indications; coordinate with PCP/endocrine/weight clinic.	BMI >=30 with HFpEF symptoms, DM/obesity, functional limitation; pair with diet/resistance training.	GI effects, dehydration risk with diuretics, gallbladder/pancreatitis cautions. HF benefit data strongest for obesity-related HFpEF trials.

Phenotype-Driven Comorbidity Plan

- **AF:** anticoagulate by CHA2DS2-VASc; avoid RVR and excessive bradycardia. Rhythm control is reasonable when AF causes decompensation or symptoms.
- **HTN/LVH:** consistent BP control is treatment. Consider ARB/ARNI, thiazide-like diuretic, MRA; avoid edema-provoking meds if possible.
- **CKD/DM:** SGLT2 if eligible; ARB/ACEi/ARNI for albuminuria/BP; individualize A1c goal.
- **Obesity/OSA:** weight loss, sodium/calorie strategy, exercise, sleep study/CPAP when indicated. Consider anti-obesity pharmacotherapy if eligible.

Rehab / Structural Disease / Amyloid

- **Exercise:** cardiac rehab or supervised aerobic + resistance training improves function/QOL even when meds are limited.
- **CAD/ischemia:** treat angina/ischemia and risk factors; HFpEF symptoms may be ischemia equivalent.
- **Valves:** quantify MR/AS/TR; treat per valve guidelines when severe/symptomatic.
- **Amyloid screen:** red flags include LVH with low voltage, carpal tunnel, neuropathy, spinal stenosis, unexplained HFpEF, elevated troponin.

Avoid / Monitor / Follow-up

- **Avoid routine use for HFpEF alone:** long-acting nitrates and PDE-5 inhibitors have no routine HFpEF benefit and may worsen tolerance.
- **Medication cleanup:** minimize NSAIDs, TZDs, non-DHP CCBs if edema/bradycardia problematic, high-dose steroids, excess salt-containing meds.
- **Follow-up after changes:** BMP/Mg and volume check within 1-2 weeks for diuretic/RAAS/MRA changes; earlier if CKD, high K, frail, or symptomatic.
- **Diuretic “sick day”:** if vomiting/poor intake/orthostasis, reassess diuretic/SGLT2 temporarily and check labs.

Sources used: 2023 ACC Expert Consensus Decision Pathway on HFpEF; 2022 AHA/ACC/HFSA HF Guideline; 2023 ESC focused HF update; STEP-HFpEF semaglutide and SUMMIT tirzepatide obesity-HFpEF trials. Educational reference only - individualize to renal function, potassium, BP, rhythm, frailty, and local protocols.