Primary Care Heart Failure Treatment Guideline Suspect heart failure if: breathlessness, fatigue, oedema Mandatory baseline tests: •NT-pro-BNP needed before referral in all patients. •Blood tests: U+Es, FBC, TFTs, LFTs, HbA1c & lipids ECG if available Consider: CXR, urinalysis, lung function tests **Check NT-pro-BNP** Raised NT -pro-BNP If NTproBNP 400-2000pg/ml, **Normal** >2000pg/ml; refer to PRIMARY CARE now to request Sirona HF service for a echocardiogram at their local review at the one stop secondary care hospital echo/consultant clinic Heart failure unlikely; consider within 2 weeks alternative diagnosis. Discuss with DO NOT REQUEST ECHO specialist if ongoing concerns EF > 50%/ HF preserved Systolic LV Systolic RV Valvular Heart **EF** Dysfunction EF < 50% **Dysfunction Disease** To make diagnosis, support is available from Assess NYHA status (box secondary care provider below) where the ECHO was Seek advice from site where the ECHO was See treatment algorithm completed via A&G/ERS or completed via ERS/A&G if needed or trust the for LVSD trust the patient would be patient would be referred to Ensure correct GP coding referred to. for LVSD (need both a heart failure code AND LVSD code to qualify for For all patients: Assess NYHA status (box below) QOF) Discuss treatment goals and See treatment algorithm for Seek advice from site advanced care planning preserved ejection fraction/ EF where the ECHO was Consider ReSPECT form & >50% on page 3 completed via A&G/ERS process Ensure correct GP coding for if needed or trust the preserved ejection fraction patient would be referred

NYHA I: No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).

NYHA II: Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).

NYHA III: Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.

NYHA IV: Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.

Treatment Algorithm for LV Systolic Dysfunction

1st Line: ACEi and beta blockers (start either one first)

- Ramipril 1.25mg od-bd, increase every 2 weeks, target dose 5mg bd
- Bisoprolol 1.25mg od, increase every 2-4 weeks, target dose of 10mg, target HR <75
- Consider ARB if ACEi intolerant (candesartan or losartan)

Diuretics for symptomatic relief; use either

- •Furosemide up to 120mg daily (some patients may have an increased diuretic requirement seek specialist advice)
- •Bumetanide up to 3mg daily (as above)



If NYHA II-IV despite optimised first-line treatment, consider the following:

• MRA such as Spironolactone 12.5-50mg od

If NYHA II-IV and EF ≤ 45% check iron deficiency status

- •Step 1: Check anaemia status –If Hb<15g/I, proceed to step 2. No role for IV iron if Hb >15g/dl. Consider investigations for cause of anaemia if Hb <13g/dL (male) or <12g/dL (female)
- •Step 2: Check ferritin and TSAT refer for consideration of IV iron if ferritin <100mcg/l or ferritin 100-299mcg/l and TSAT <20%



If NYHA II-IV, EF<50%, specialist to consider SGLTT-2i as add on to optimized treatment if still symptomatic:

dapagliflozin 10mg od or empagliflozin 10mg od on advice of heart failure specialist (TLS Amber Specialist Recommended)

If NYHA II-IV and EF ≤ 35% heart failure specialist to assess need for the following treatments:

- •Epleronone 25-50mg (as alternative to spironolactone) on advice of heart failure specialist (TLS Amber Specialist Recommended)
- •Ivabradine 2.5 7.5mg bd if sinus rhythm and HR ≥ 75bpm
- •ARNI (sacubitril/valsartan) in place of ACEi/ARB
- •CRT (cardiac resynchronization therapy) or ICD (implantable cardioverter-defibrillator)

If NYHA II-IV and EF ≤ 35% despite optimised second-line treatments, specialists to consider:

Digoxin

Hydralazine in combination with a nitrate if ACEi/ARB/MRA not tolerated/contraindicated.

Cardiac transplantation / Left Ventricular Assist Device (LVAD)

Monitoring

Refer to Heart Failure Guidelines available on the cardiovascular system guideline page for:

- Practical Guidance on how to use heart failure medicines
- How to monitor renal function and potassium rises in stable heart failure
- Use of dapagliflozin and empagliflozin (SGLT2i) in patients with heart failure

Lifestyle Advice -

- •Exercise (consider referral to cardiac rehab programme)
- Smoking, diet
- Sexual activity, pregnancy & contraception
- •Flu vaccination, air travel
- Driving
- •COVID-19 precautions
- •Occupational support/advice

Symptom Management-

Consider:

- •St Peter's hospice fatigue
- & breathlessness course
- Referral to palliative care
- Psychosocial support eg Harbour counselling
- •Hospital @ Home

End of Life Planning

Identify patients for palliative care register

End of Life indicators include:

- Progressive general deterioration
- Frequent hospital admissions
- •No response to increased treatment
- •Frequent ICD shocks consider device deactivation via pacing clinic
- •BNSSG Remedy End of Life Care

Optimise co-morbidities including

- Hypertension
 - -spironolactone is preferable due to benefits in HF-PEF, as well as hypertension and as a diuretic. If already established on ACEI/ARB these can be continued
- Diabetes
- Smoking
- Obesity

Consider treatment with low to medium dose loop diuretics (furosemide <80mg/day) (or equivalent) to relieve symptoms of fluid overload

If patients remain symptomatic, consider specialist advice to assess need for:

SGLT2i dapagliflozin 10mg od on advice of heart failure specialist (TLS Amber specialist recommended) or empagliflozin 10mg od on advice of specialist (TLS Amber specialist recommended)

Monitoring

Monitor renal function after each dose change of diuretic

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