Primary Care Cardiovascular Society

Driving primary care to deliver the best in cardiovascular health

Modern management of heart failure

Webinar - Wednesday 17th November 2021

Watch the webinar in full and hear other questions that were discussed and answered:
https://pccsuk.org/2020/en/page/az-blended-webinar

Question 1. **In an end-stage HF patient, are there any medications amongst the pillar drugs that can be stopped?**

Answer 1. Where patients on optimised therapy for heart failure remain symptomatic with fluid retention are not responding to diuretic therapy, then I would consider discussing with a member of the heart failure specialist team. All evidence-based therapies may improve symptoms in addition to longer term outcomes, therefore discontinuing them may accelerate the deterioration in a person's well-being. Where a decision has been reached that a person is at the "end of life" then reduction or withdrawal of evidence-based therapies may be considered, though ideally with specialist support.

Question 2. **What is the context for the 52% mortality rate, is this for all HF, or just untreated HF?**

Answer 2. The placebo (no evidence-based therapy) heart failure population in the CONSENSUS study published in 1987 had a 50% one-year mortality. The treatment group in this study were given enalapril and this was the first landmark trial to show the benefit of ACE inhibition in heart failure with reduced ejection fraction.

Question 3. **HfpEf has a similarly high symptom burden for patients. Do you have any thoughts on medical management for this patient group? Can SGLT2Is be used for people living with HFpEF? In particular, empagliflozin or dapagliflozin?**

Answer 3. Currently, the management of HFpEF is based around the use of diuretic therapy to address symptoms including fluid retention and optimising the management of significant co-morbidities such as hypertension, Atrial Fibrillation, Ischaemia Heart Disease and Diabetes.

Recently, the EMPEROR-PRESERVED trial showed statistically significant benefit (largely based around reduction in hospitalisation for heart failure) in a patient population with heart failure and an ejection fraction of more than 40% when the SGLT2 inhibitor empagliflozin was compared to placebo. Currently, no SGLT2 inhibitors are licenced for use in this population (EF greater than 40%).

Question 4. **Can you please talk a bit about Entresto© (sacubitril/ valsartan)? Any outcome data?**

Answer 4. Entresto is a combination therapy of sacubitril (a neprilysin inhibitor) and valsartan (angiotensin-II receptor blocker). The PARADIGM trial, published in 2014, showed that in a symptomatic HFrEF population optimised on background evidence-based therapies, patients treated with sacubitril valsartan (when compared to enalapril) had significant reduction in symptoms and long-term outcomes (cardiovascular death, hospitalisation for heart failure, and all cause mortality). Sacubitril Valsartan was initially introduced as a second-line therapy for patients with HFrEF (ejection fraction less than 35%) who remained symptomatic despite standard triple therapy (ACE (or ARB)/Beta blocker /MRA) but is now being considered by many heart failure clinicians as an alternative first-line RAAS blocking therapy.

The PARAGON study, published in 2019, looked at the use of Sacubitril Valsartan in a heart failure population with an ejection fraction of 45% or higher and did not show a statistically significant reduction in the primary end point of cardiovascular death or hospitalisation for heart failure.

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Question 5. **Any thoughts on CKD and HF?**

Answer 5. CKD is a very common comorbidity in HF with renal function, an important consideration when introducing and titrating the evidence-based therapies for HFrEF though the benefits of treatment are maintained. RAAS blocking drugs (ACE/ARB) and SGLT2i have been shown to be beneficial in the treatment of both HF and CKD.

Question 6. **How practically can local systems generate a focus on HF? I wonder if PCCS needs to develop a sample commissioning pack.**

Answer 6. In primary care, PCNs will have heart failure service requirements as part of CVD prevention agenda and through the work of Regional Cardiac networks HF pathway which involve primary care. From April 2022, there is a PCN service requirement around raising awareness of the importance of early diagnosis of HF and the use of NTpro BNP.

Question 7. **Do you think we should be reviewing patients more actively and initiating dapagliflozin, for example, without referring to specialist service?**

Answer 7. In primary care, we should be reviewing our HF patients at least annually and in fact NICE recommends every 6 months. The NICE TA for dapagliflozin suggests that dapagliflozin can be started on the advice of a HF specialist. Therefore patients in the community who are symptomatic can be initiated on dapagliflozin by a GP or non-medical prescriber having discussed with or sought the advice of a HF specialist.

Question 8. **Is there a role for oxygen at home?**

Answer 8. The NICE Guidelines (NG106) advise not offering long-term home oxygen therapy for advanced HF. This is because there is no evidence that home oxygen therapy improves symptoms or QoL for people with chronic HF. However, oxygen at home may be offered for comorbidities, such as for adults with COPD.

Question 9. **Do HF nurses and cardiac rehab make a statistically significant difference to mortality/hospitalisation rates?**

Answer 9. It is generally acknowledged that exercise-based cardiac rehab has a beneficial effect on patient outcomes. The DoH policy paper on improving cardiovascular disease outcomes, published in 2013 and referred to in the NICE guidelines (NG106), noted that increasing the proportion of people with HF who have cardiac rehabilitation would reduce mortality and hospitalisation. However, although recent trials have provided some good quality evidence of the benefits of exercise-based rehab in reducing the risk of hospital admissions, there is still uncertainty about the impact on mortality.

A Cochrane meta-analysis of 44 trials of exercise-based cardiac rehab in patients with HF, published in 2019, reported that rehab significantly reduced all-cause hospitalisations (relative risk 0.70 [95%CI 0.60–0.83]) and HF-specific hospitalisation (relative risk 0.59 [95%CI 0.42–0.84]). However, the authors also reported that cardiac rehab did not reduce the risk of all-cause mortality (relative risk 0.89 [95%CI 0.66–1.21]). There were no differences in effect across different models of delivery, such as centre or home-based programmes. The ESC Guidelines on HF commented that the effect on hospitalisation is seen in those who are highly adherent to the exercise programme.

Further trials are needed to better show the effects of rehab among patients with HF. Meanwhile, both the ESC and NICE recommend that all people with HF should be offered a personalised, easily accessible, exercise-based cardiac rehab programme, unless their condition is unstable.

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Question 10. How do you manage HF without reduced ejection fraction?

Answer 10. NICE guidance recommends that patients with HFpEF should usually be managed with low to medium dose loop diuretics, such as, <80 mg furosemide/day. If patients do not respond to this treatment, specialist advice is required.

The ESC Guidelines also advise that reducing body weight in obese patients and increasing exercise may further improve symptoms and exercise capacity. Most HFpEF patients have underlying hypertension and/or CAD, so it is important to treat these comorbidities effectively as well.

Question 11. Is it ok to start dapagliflozin in a patient with a normal BMI and hba1c of 32? Also, what level of eGFR is it safe to start?

Answer 11. Yes, dapagliflozin (10 mg once daily) is indicated for patients with symptomatic chronic HFrEF as an add-on to optimised standard care based on an ACE inhibitor, ARB or sacubitril valsartan (see dapagliflozin SmPC and NICE TA), regardless of the presence or absence of T2DM. Dapagliflozin can be used in patients with a normal BMI and normal range HBA1c.

There is limited data for the use of Dapagliflozin in people with HFrEF and an eGFR is <30 mL/min/1.73m (see DAPA-HF trial)

NICE TA679 recommends that a HF specialist should advise on starting dapagliflozin.

Question 12. What tool do you use to assess functional capacity and nutritional status?

Answer 12. The ESC guidelines state that the New York Heart Association functional classification uses the simplest terminology to describe severity of symptoms and physical activity. The HFA of ESC has also developed a HF-specific frailty tool which includes a functional domain that focuses on physical impairment, which is commonly seen in HF patients with a global imbalance between the anabolic and catabolic state.

The following tools are not HF specific, but have been assessed for suitability for use in patients with HF:

- Mini Nutritional Assessment–Short Form (MNA-SF) can be found at https://www.mna-elderly.com/sites/default/files/2021-10/mna-mini-english.pdf.
- Clinical frailty scale (CFS) can be found at https://www.scfn.org.uk/clinical-frailty-scale

Question 13. What specifically are you looking for by checking LFTs in the investigation of HF?

Answer 13. Liver function tests are recommended to differentiate HF from other conditions and may be relevant to potential therapy.

Patients with hepatic disease, may have symptoms and signs very similar to those of HF, but in the absence of cardiac dysfunction, they do not fulfil the criteria for HF. However, these pathologies can coexist with HF and exacerbate the HF syndrome. Importantly, liver dysfunction (mainly liver cirrhosis with ascites) can cause increased levels of natriuretic peptides, so this reduces their diagnostic accuracy in HF.

Extra-cardiac organ dysfunction related to HF may affect liver function due to hepatic congestion. Patients with chronic HF and severe hepatic dysfunction have poor outcomes, and in acute HF, detection of abnormal liver function also identifies with a poor prognosis.

Furthermore, significantly impaired liver function may affect clotting factors, which may bring additional considerations for patients with heart failure and atrial fibrillation where anticoagulation is considered for stroke prevention.

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These questions have been answered by Dr Jim Moore, President PCCS, GP, GPSI Cardiology, Gloucestershire.

WEBINAR AGENDA – Modern Management of Heart Failure		
13:00	Webinar opening	**Professor Ahmet Fuat** *PCCS Council Member and former PCCS President. Honorary Professor of Primary Care Cardiology, Durham University. GP, GP Appraiser and GPSI Cardiology*
13:05	The role of primary care in managing heart failure	**Dr Jim Moore** *President PCCS, GP, GPSI Cardiology, Gloucestershire*
13:20	Optimising heart failure services	**Louise Clayton** *Advanced Nurse Practitioner and Heart Failure Hospital Service Lead in Leicester*
13:35	Q&A/panel discussion	Conversation between **Dr Jim Moore, Louise Clayton** and **Professor Ahmet Fuat**
14:00	Webinar close	

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