

Protocol Review: Evidence used and rationale

Protocol name: Heart Failure

Working Group:

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With Consultation from:

Dr John Tan (Cardiologist, WA Cardiology)

Screening

In this section formatting has been changed. The CVD risk calculator mention has been removed as it is within the "CAD " protocol which is already mentioned.

Case Definition

Definition remains unchanged

The "clinical presentation" and "clinical evaluation" sections have been newly added to this protocol. This was felt to be a worthwhile addition by the working group as heart failure is predominantly a clinical diagnosis. The references for these additions include Murtagh 5th edition and 2016 ESC (European Society of Cardiology) Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure.

As discussed with the working it has been mentioned under "investigation" that echocardiograms do have limitations, particularly with diastolic dysfunction.

Principles of Management

"Baseline clinical assessment" is a new heading which was not in the previous protocol. As this is rarely a clinical diagnosis it is important to note this and to provide a clear guideline for junior staff to follow. This has been prepared with references including 2016 ESC Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure

"Baseline investigations" has been slightly altered. There is also mention of BNP, which is actually mentioned as being a routine form of investigation in the 2016 ESC Guidelines. Due to limitations in the Medicare Benefits Scheme (MBS) BNP can only be billed if there is a presentation to the emergency department with shortness of breath. With this in mind the investigation has been added to consider. In the Kimberley PathWest is using NT-proBNP as standard, with a measurement <300 ng/L makes CHF unlikely hence this reference range was added. This matter was also discussed with cardiologist Dr John Tan, whom recommended that this be added to the current standard for investigating HF, however given the limitations with MBS the working group have only added this as a suggestion.

In the "Management" section has been re-formatted and split into non-pharmacological and pharmacological management for ease of reading at point of care. Exacerbating medications have been listed more clearly, again to allow clinicians to easily see medications to review. This list has been added to and there is also mention of DPP4 inhibitors and GLP-1 inhibitors as these are new medications which are becoming more commonly used. These changes have been made in reference to the new ESC guidelines 2016.

Within the "non-pharmacological management" section a few additions have been made which were not present in the previous protocol. This is namely adding in "no added salt and limited caffeine intake" with reference to the Australian Heart Foundation and ESC guidelines. The working group felt that adding a gram recommendation may not be very useful and rather advising a patient to not add salt would be a more useful guideline.

There is now also mention of cardiac rehabilitation which has a significant evidence base. It is noted that there is limited availability of this within the Kimberley region. The only formal cardiac rehabilitation is provided on an outpatient basis through the physiotherapy department at Broome hospital. This comment was made in liaison with the physiotherapy department at the Broome

hospital and they encouraged referral for patients whom are motivated only, as there is a high rate of non and poor attendance.

There is also more specific mention about fluid limitation. This is not advised for patients for mild cardiac failure, so this statement has been more prescriptive.

Sleep apnoea and depression have also been noted as significant co-morbidities, so have been mentioned as they can affect treatment and prognosis.

The statement about vaccination has been clarified and has been interpreted from the Australian Immunisation Handbook. The working group feel this is much clearer, otherwise each clinician has to review the large immunisation handbook, which is difficult to interpret at the point of care setting.

Within the “pharmacological management” the medications are now discussed in more detail. Comments have been made with reference to the ESC guidelines 2016 and Australian Medicines Handbook.

Therapeutic Protocols

A new table, clearly outlining management has been developed. This is made in reference to the new ESC guidelines.

The working group felt that this provides a clear diagram that can be followed easily at point of care, as opposed to prose, which was predominant in the previous protocol.

Follow Up

There have been minimal changes to this section.

The sole change is the mention that echocardiogram should be repeated if there is a symptomatic decline.

Women of Child Bearing Age

There have been minimal changes to this section. The Australian Medicines Handbook was reviewed in regards to the use of enalapril and is stated to currently be safe in pregnancy.

The only change made includes mentioning stopping ACE-I/ARBs if pregnancy is planned.

Refer/Discuss

This section has been reviewed by both physician Dr Christian Brinker (apart of the working group) and cardiologist Dr John Tan whom agree with the criteria for physician and cardiology referral.

There is also new mention that palliative care referral be considered in patients with end stage heart failure. The working group felt that this was a worthwhile mention as it is often poorly considered that this can be a terminal condition and that flagging this in the protocol will prompt this though process and potentially discussion with the patient.

Key References

- 2016 ESC guidelines for the diagnosis and treatment of acute and chronic heart failure
<http://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Acute-and-Chronic-Heart-Failure>
- Murtagh 6th Edition
- AMH (enalapril)
- Australian Immunisation handbook (section on pneumovax and influenza immunisation)
- CARPA standard treatment manual
http://www.remotephcmanuals.com.au/publication/stm/Heart_failure.html
- Therapeutic guidelines- Heart Failure: nonpharmacological management; Heart Failure: pharmacological management
- Chronic Conditions Manual: Prevention and Management of Chronic Conditions in Australia - 1st edition 2015 <https://publications.qld.gov.au/hr/dataset/chronic-conditions-manual>
- Medicare Benefits Scheme
<http://www9.health.gov.au/mbs/search.cfm?q=BNP&Submit=&sopt=S>