Congestive heart failure | Te mate manawa kikī

Always note the cause of heart failure if possible, eg, previous MI, hypertension.

**Signs that suggest heart failure**

- Tachycardia (heart rate > 100 bpm)
- Third heart sound (S₃) assessed by GP/NP
- Increased jugular venous (JVP > 2 cm)
- Lung sounds - increased crackles in posterior bases (also known as crepitations)
- Pedal (or sacral) oedema
- Heart apical pulse displaced to the left (also known as point of maximal impact – usually 5th intercostal space midclavicular line - not acute sign if this is about acute heart failure exacerbation
- Weight gain - contact GP/NP if > 2 kg in 2-5 days.

**Symptoms that suggest heart failure**

- Shortness of breath (SOB) on exertion
- SOB when lying down and preferring to sleep sitting up (orthopnoea)
- Waking suddenly in respiratory distress (paroxysmal nocturnal dyspnoea)
- Increased fatigue
- Unexplained cough especially at night
- Acute confusional state – delirium
- Nocturia (increased urination at night; if excessive can be an early warning sign).

**New York Heart Association (NYHA) functional classification system for congestive heart failure severity**

- **Class 1 – no limitations**
  Ordinary physical activity does not cause undue fatigue, dyspnoea or palpitations.
- **Class 2 – slight limitation of physical activity**
  Ordinary physical activity results in fatigue, palpitations, dyspnoea or angina pectoris (mild CHF).
- **Class 3 – marked limitation of physical activity**
  Less than ordinary physical activity leads to symptoms (moderate CHF).
- **Class 4 – unable to carry on any physical activity without discomfort**
  Symptoms of CHF present at rest (severe CHF).
Determine previous history of congestive heart failure

Is there a previous history of congestive heart failure?

- Y
  - Has their condition deteriorated?
    - Y
      - Evaluate complaints of paroxysmal nocturnal dyspnoea, orthopnoea, new onset of SOB on exertion unless there is a clear non-cardiac cause for symptoms
    - N / Uncertain
  - N
    - Continue with current care plan

Assess for possible causes
- Difficulty with correct amount of drugs, diet, fluid? Review plan for drugs, diet fluid intake with GP/NP
- Weigh resident daily to monitor for fluid retention
- Hazardous drugs? Arrange GP/NP review, consider stopping drugs, eg. NSAIDs
- Acute infection? Arrange GP/NP review, consider antibiotics
- New arrhythmias? Arrange GP/NP review, consider intervention in facility or acute admission or referral, eg. atrial fibrillation
- Acute ischemic/infarction and other causes? Arrange GP/NP review/consider intervention in facility or acute admission or referral, eg. anaemia, embolism, heart attack

Follow orders as per directed by GP/NP
- Often it will be an increase in furosemide, eg. 20 mg furosemide per kg of weight gain
- If no improvement in 24 hours (no weight loss or decrease in signs), contact GP/NP
- If improved in 24 hours (weight loss), provide update to GP/NP

Arrange GP/NP review and consider acute admission or referral to specialist
- when diagnosis and/or cause is uncertain
- if irregular heart rate, particularly if it is new
- in those with sudden onset of symptoms of heart failure
- when inadequate response to treatment

Is there an individualised care plan for this condition?
- Y
  - Implement care plan
- N
  - Review with GP/NP and revise care plan

Review advance care plan and implement an active palliative approach for all symptoms to improve quality of life
Chest pain

Assess chest pain

| Pain | Described as squeezing, tightness, pressure, constriction, burning, fullness in chest, band-like sensation, knot in the centre of the chest, ache, heavy weight on chest. Sometimes cannot be described but patient places fist in centre of chest known as the ‘Levire sign’. Patient may also describe pain as discomfort rather than pain. (Non-ischemic pain may be described as sharp or stabbing.) |
| Location | Almost always involves the centre of the chest or upper abdomen. Ischaemic chest pain/angina usually not felt in specific spot but throughout the chest. May have difficulty saying exactly where the pain is. |
| Radiation | May include the neck, throat, lower jaw, teeth (feeling like toothache), or the shoulders and arms. May be felt in wrists, fingers or back between the shoulder blades. |
| Timing | Ischaemic chest pain/angina tends to come on gradually and get worse over time; generally lasts 2-20 minutes. Non-ischaemic pain begins suddenly and feels worst in the beginning, usually lasts a few seconds. Pain that has been constant over days or weeks is also not likely to be ischemic chest pain/angina. |
| Associated symptoms | Shortness of breath (dyspnoea), nausea, vomiting or belching, sweating, cold clammy skin, palpitations, fatigue, presyncope, syncope, indigestion, vague abdominal discomfort. |

Previous history of chest pain?

- GTN if there are standing orders
- Oxygen 4 l/min if prescribed
- Inform GP/NP/phone 111 if for hospitalisation

Follow prescribed plan, eg. GTN spray
- One dose under the tongue
- Second dose 5 mins later if required, and then third dose if necessary
- If pain persists, seek medical advice immediately
- If pain settles, inform GP/NP at next appointment
- If pain is frequent or daily, inform GP/NP immediately

Does the care plan address this issue?

- Review care plan with GP/NP and revise
- Follow the plan
Palliative care

Palliative care should be considered for patients with the strong possibility of death within 12 months and who have advanced symptoms, eg, NYHA class 4, poor quality of life, and are resistant to optimal pharmacological and non-pharmacological therapies. Strong markers of impending mortality include:

- advanced age
- recurrent hospitalisation for decompensated heart failure and/or a related diagnosis
- NYHA class 4 symptoms
- poor renal function
- cardiac cachexia (weight loss)
- low sodium concentration (hyponatraemia)
- hypotension necessitating withdrawal of medical therapy
- anaemia
- chronic elevated troponin
- increased BNP.
Bibliography | Te rārangi pukapuka

Congestive heart failure


See the full range of frailty care guides here.