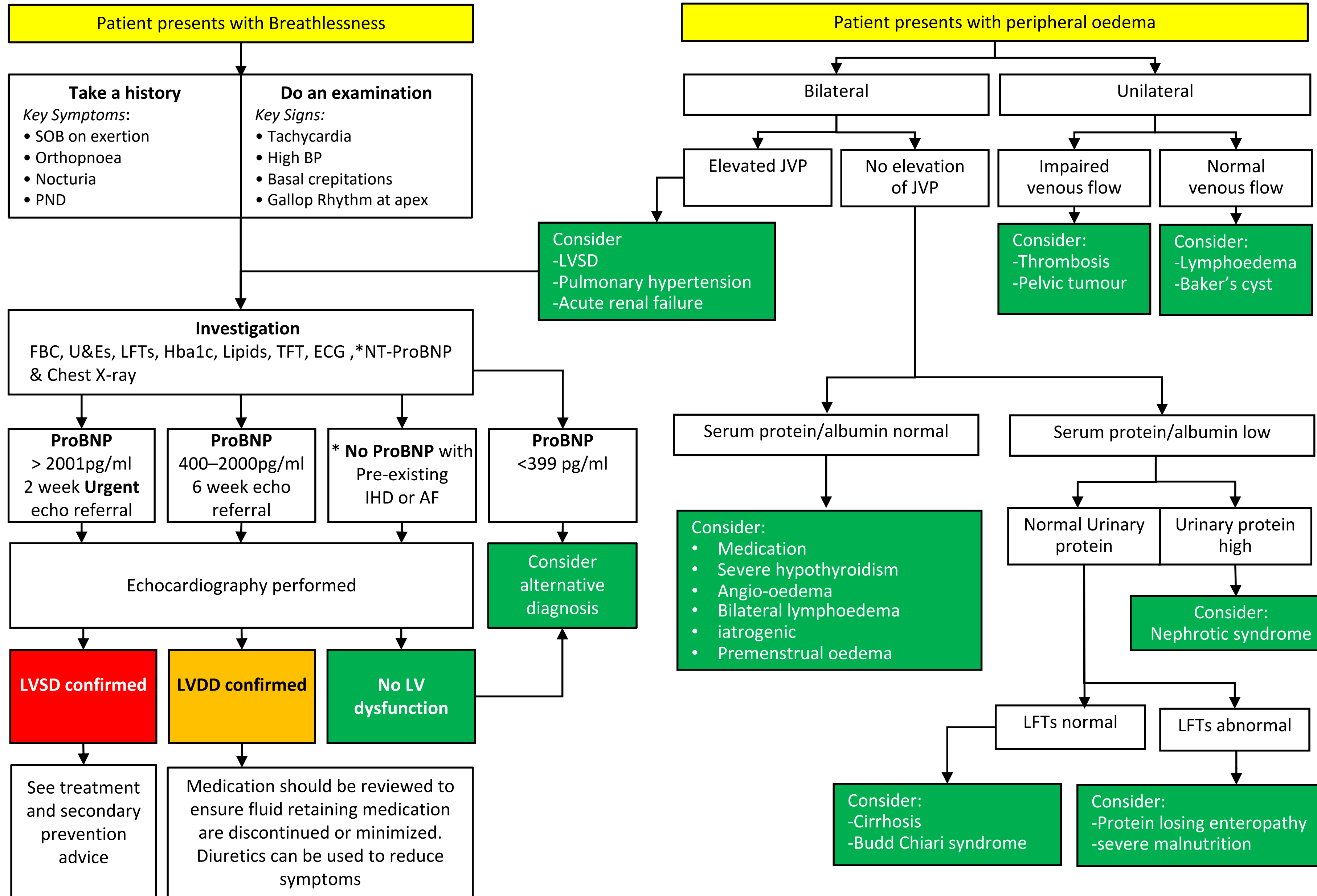
Managing of LVSD: detection & diagnosis



Breathlessness in Primary Care

	Age 57	Age 67
Breathless	5.2%.	10.3%
Probable Cardiac cause	21%.	32%
Probable Respiratory cause	29%.	26%
Both	29%.	22%
Neither	21%	19%

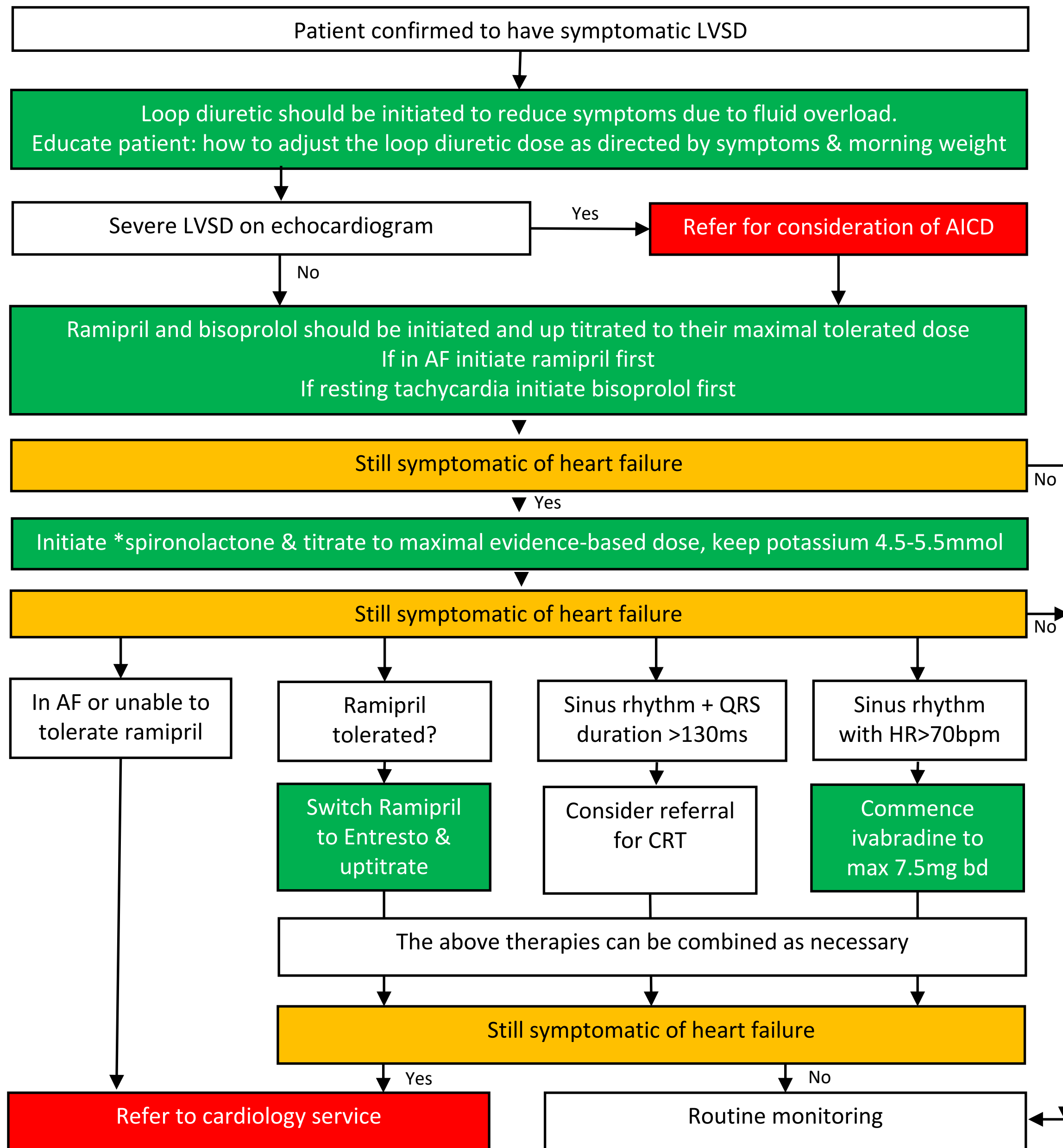
****Differential diagnosis of breathlessness**

- Anaemia
- Anxiety with hyperventilation
- Asthma
- COPD
- Coronary disease (usually with chest pain)
- **Deconditioning**
- Dysrhythmia
- Fibrotic lung disease
- Gastro-oesophageal reflux
- Heart failure
- Metabolic dysfunction (e.g. acute renal failure)
- Neoplasm
- Pericardial effusion or restriction
- Pleural effusion
- Primary pulmonary hypertension
- Pulmonary embolise (acute or chronic)
- Restrictive lung disease
- Valvular heart disease

A normal ECG and Low BNP precludes LVSD or LVDD as the cause of breathlessness

There may be symptoms and signs of heart failure syndrome however the cause will not be due to pump failure

Managing of LVSD: management



***Initiating Spironolactone**

The U&Es should be check

- 2 weekly for the first month
- 4 weekly for the next 2 months
- 3 monthly there after

Spironolactone should stopped if significant decline in renal function or if the potassium is >5.5mmol

Medication switches

Ramipril

Issues with ACEI cough: Ramipril should be discontinued and bisprolol up titrated to its maximal tolerated dose. The preferred medication switch would be to Entresto not an ARB.

This switch will not resolve issues with renal decline or angioneurotic oedema

Bisoprolol

Issues with hypotension, fatigue or sensitivity: replace bisoprolol with ivabradine and up titrate to 7.5mg bd determined by heart rate.

Ivabradine cannot be used in AF

Spironolactone

Issues with breast development or lactation: switch to eplenerone and up titrated in the same manner.

This change will not resolve issues with elevated serum potassium or renal decline

New York Heart Association symptom grading

- NYHA I - No symptoms
- NYHA II - Mild symptoms (e.g. walking)
- NYHA III - Marked limitation
- NYHA IV - Severe limitation (e.g. at rest)

Reasons for early referral to cardiology team

- You feel unsure about how to proceed
- Uncertain aetiology of LVSD
- Issues with symptom management
- <55yrs where transplant maybe considered
- LVSD due to cardiomyopathy
- LVSD caused by AF
- Hypotension due to pump failure or iatrogenic
- Resting bradycardia
- Complex comorbidities, particular ≥ CKD3
- Complex emotional or social issues

All those with LVSD should be offered rampiril and bisoprolol up to the maximal tolerated dose
All those with LVSD with NYHA ≥II should be offered spironolactone and possibly Entresto

All those in AF with LVSD should be offered anticoagulation as this is a very powerful stroke risk feature of CHA_2DS_2VASc

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