

## **Carvedilol in the Treatment of Heart Failure**

### **Applicable to:**

- All patients diagnosed with heart failure and commenced on carvedilol.

### **Patients not discharged on carvedilol or an alternative beta-blocker:**

- Confirm that there is a contraindication to beta-blocker therapy
- If no contraindication refer to the PCT heart failure specialist service for assessment.

### **Patients discharged on a beta-blocker other than carvedilol:**

- If discharged on bisoprolol, or nebivolol, ensure that they are on the appropriate, or maximum tolerated dose for heart failure.
  - Bisoprolol 10mg Daily
  - Nebivolol 10mg Daily
- Patients initiated on a beta-blocker prior to developing heart failure, may be continued on their original beta-blocker even if it is not specifically indicated for heart failure. If concerned contact the PCT heart failure specialist service for advice.
- Maintain discharge medication and refer to the PCT heart failure specialist service if patient's symptoms are uncontrolled.

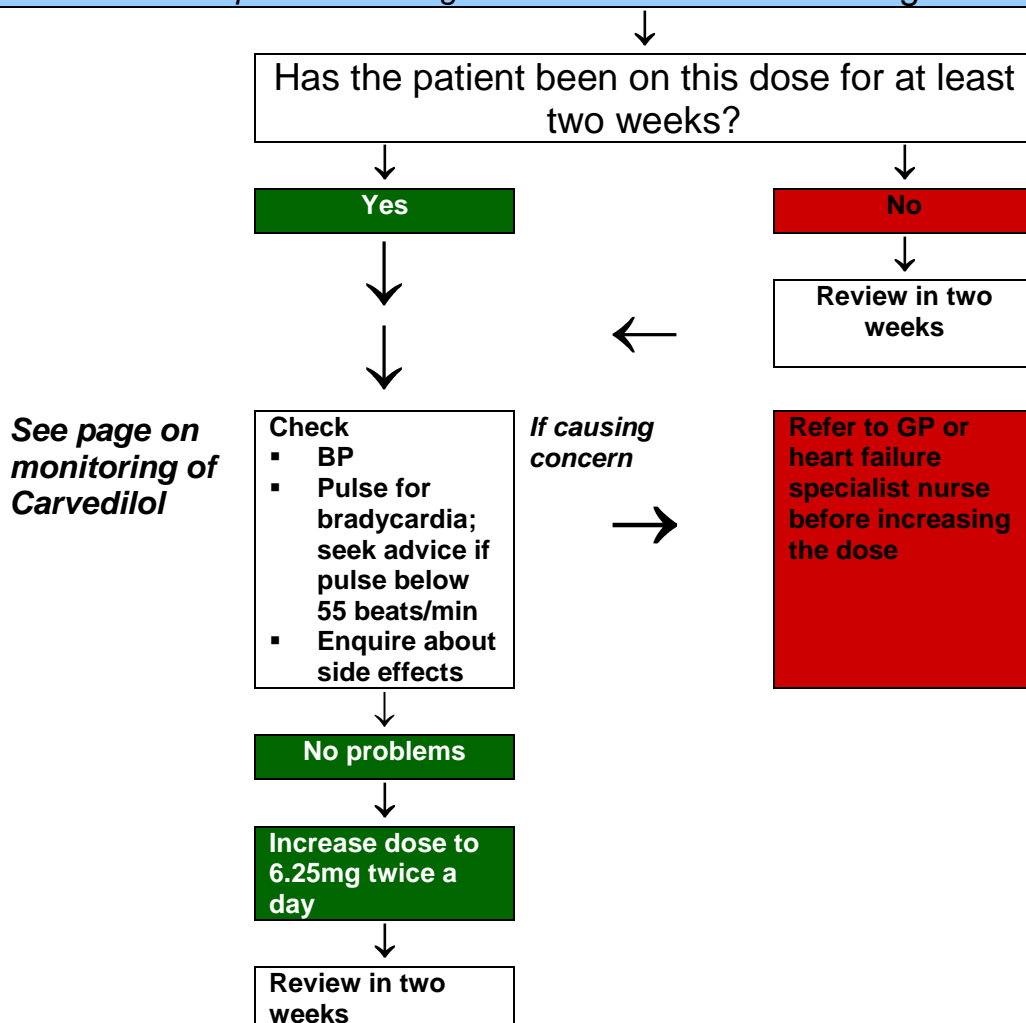
## Carvedilol in the Treatment of Heart Failure

Initiation dose 3.125mg twice a day (Patients may be discharged on higher doses)

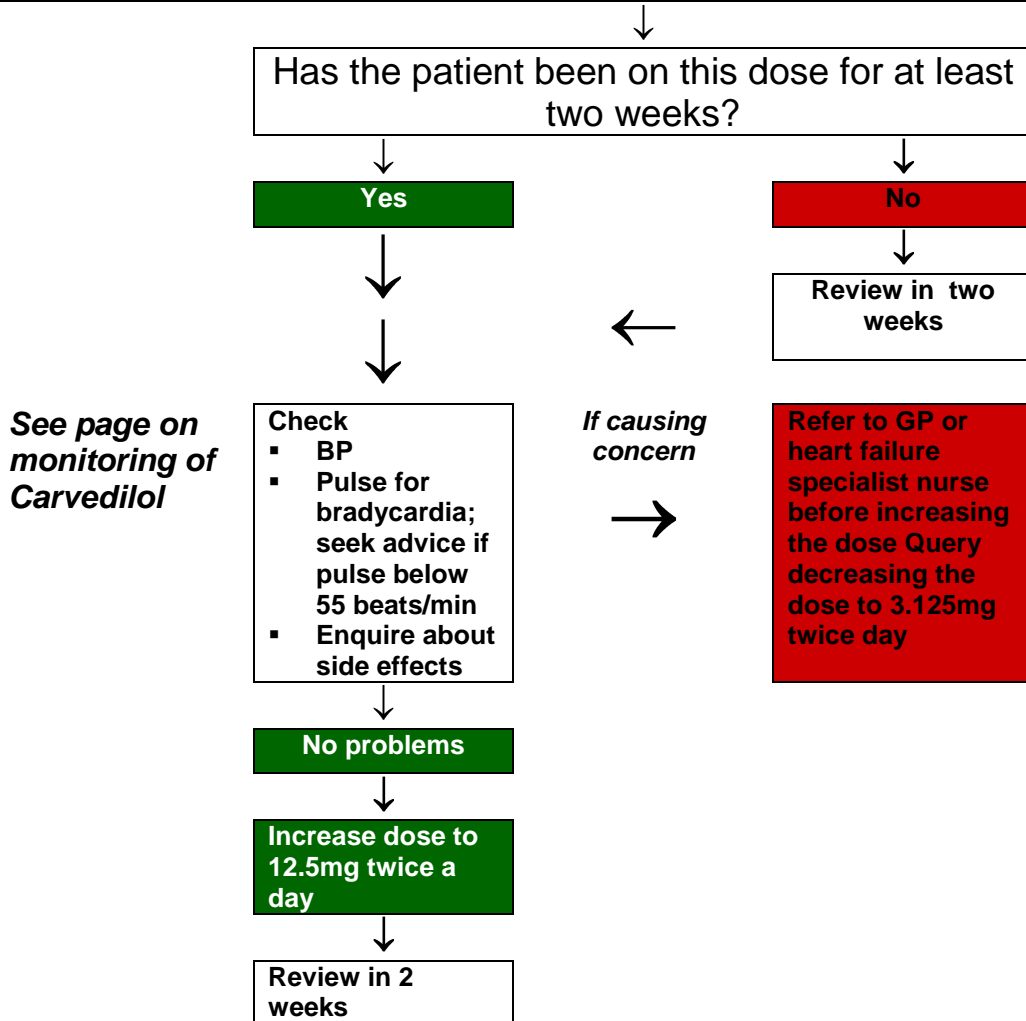
Treatment dose = 25mg twice a day / 50mg twice a day if patient over 85kg

Patients should be have their dose titrated to 25mg twice a day / 50mg twice a day if patient over 85kg or to the maximum tolerated dose.

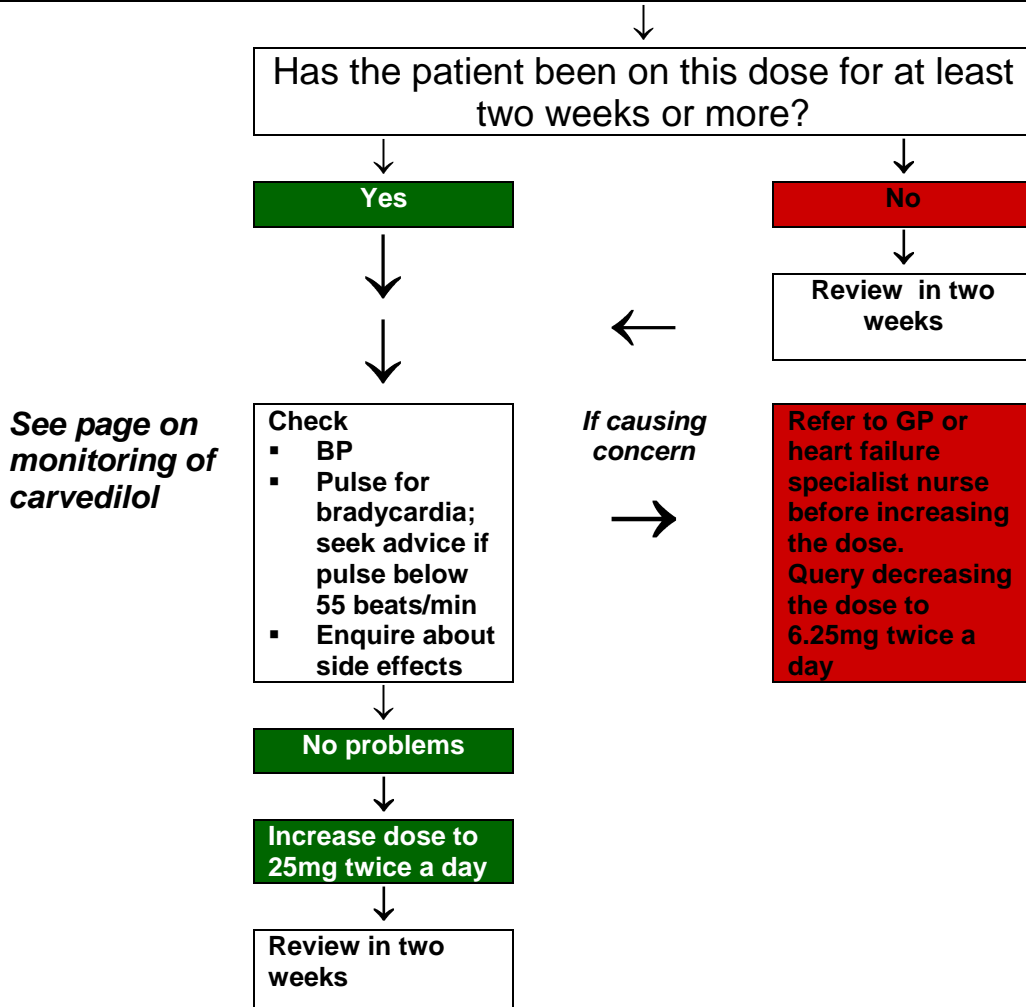
*The patient is taking Carvedilol Dose = 3.125mg twice a day*



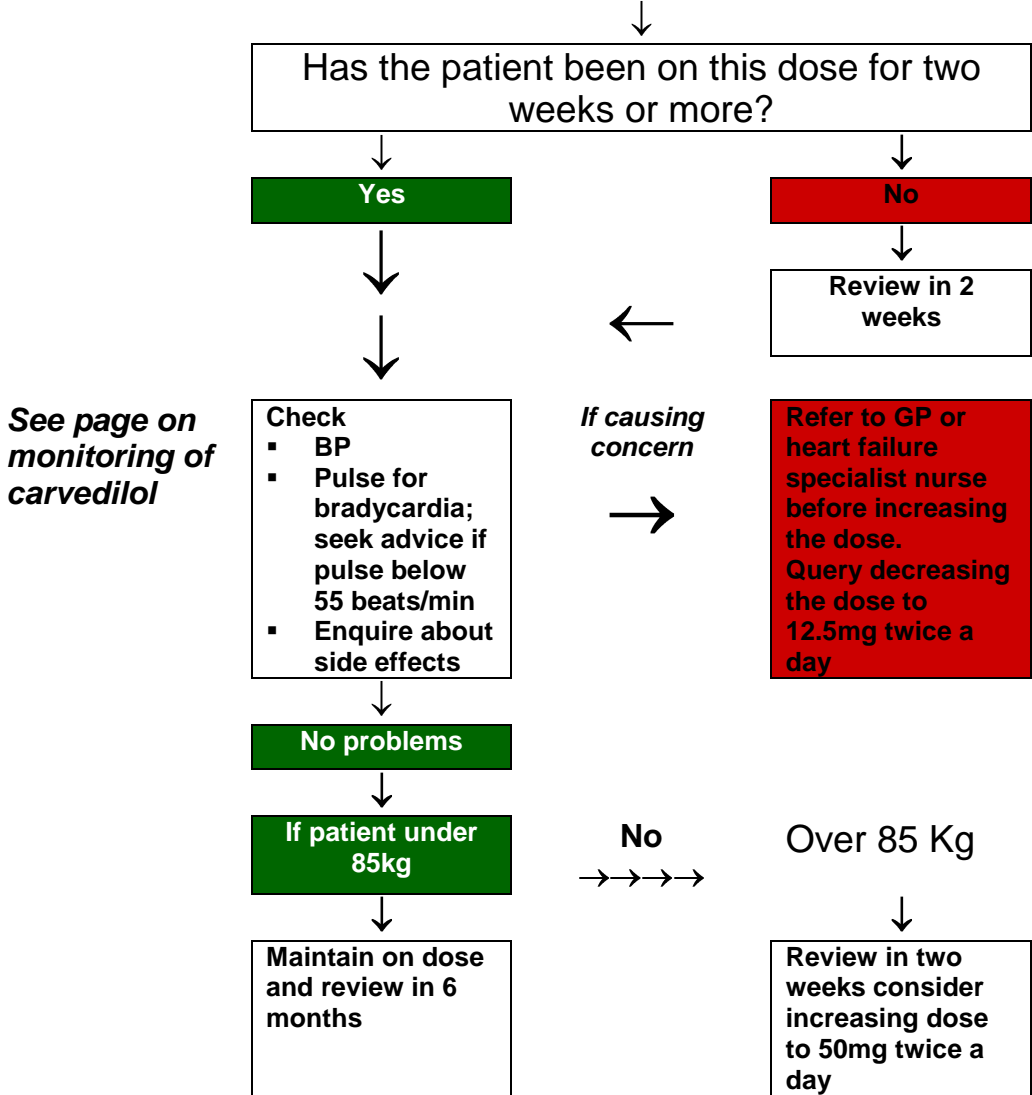
The patient is taking Carvedilol Dose = 6.25mg twice a day



The patient is taking Carvedilol Dose = 12.5mg twice a day



The patient is taking Carvedilol Dose = 25mg twice a day



See page on monitoring of carvedilol

The patient is taking Carvedilol Dose = 25mg twice a day

Has the patient been on this dose for at least two weeks or more?

+

The patient is over 85kg

Yes



No

The patient has not been on this dose for least than two weeks

Review in 2 weeks

No

The patient is under 85kg

Dose to remain at 25 mg twice a day

See page on monitoring of carvedilol

Check
- BP
- Pulse for bradycardia; seek advice if pulse below 55 beats/min
- Enquire about side effects

If causing concern



Refer to GP or heart failure specialist nurse before increasing the dose. Query decreasing the dose to 12.5mg twice a day

No problems

Increase dose to 50mg twice a day

Review in two weeks

Check
- BP
- Pulse for bradycardia; seek advice if pulse below 55 beats/min
- Enquire about side effects

If causing concern



Refer to GP or heart failure specialist nurse before increasing the dose. Query decreasing the dose to 25mg twice a day

No problems

Maintain on dose and review in 6 months

Monitoring of Carvedilol prior to increasing dose.

*The information given here is incomplete please refer to the current BNF for comprehensive details.*

## 1. BP

- < 120/80 Do not increase carvedilol dose, refer to GP or heart failure specialist nurse.
- > 160/100 Refer to doctor for advice
- For hypertensive patients continue to monitor blood pressure until the patient is stabilised at the maintenance dose 25mg twice a day (50mg twice a day in over 85kg) or the maximum tolerated dose.
- If the patient remains hypertensive at this dose refer for advice or consult the Rotherham PCT Hypertension Guidelines.

## 2. Side Effects

- **Bradycardia**

Seek advice if pulse below 55 beats/min

- **Respiratory**

Enquire about any respiratory symptoms; review/seek advice if the patient reports any respiratory problems (shortness of breath/ wheezing).

- **Pain in hands/fingers etc**

Beta-blockers can cause a peripheral vasoconstriction; review/seek advice if the patient reports pain in fingers hands etc.

- **Other Side Effects**

- Fatigue.
- Headache, GI disturbances, dry mouth, dry eyes, eye irritation, disturbed vision, allergic skin reactions.
- See BNF

### 3. Drug Interactions

- NSAIDS

- Avoid if possible. Confirm with GP that it is necessary to continue this treatment. NSAID use in heart failure patients results in a deterioration of symptom control and higher admissions rate.

- Anti-arrhythmics

- Avoid, will cause increased myocardial depression.
- Seek further advice before increasing the dose if the patients is also taking an anti-arrhythmic

- Calcium-channel blockers

- Avoid diltiazem and verapamil due to increased risk of severe bradycardia heart block and possibility of worsening heart failure.

- Thiazide diuretics

- Avoid, can precipitate diabetes when used in conjunction with a beta-blocker

- Respiratory medication

- Confirm beta-blocker has not caused or exacerbated symptoms.