



1. See **Adult Bradycardia (< 50/min)/Tachycardia (> 150/min) (with Pulse)** for indications. **Inotropes** may be used if transcutaneous pacing is **NOT** available.
2. **Explain the procedure to the patient**
3. **Consider procedural sedation and analgesia**
4. Place the pacing pads on the chest of the patient as per package instructions
5. Connect the pads cable to the pacing machine if not already connected
6. **Turn the pacer ON.** Observe for **markers (*)** indicating the R-wave on the screen. Some machines require that you **START pacing** after turning the pacer on. Observe for **pacing spikes (|)** on the baseline.
7. Set the **Rate** to approximately 60-70 bpm.
8. Set **current milliamperes (mA)** output as follows: Increase milliamperes (mA) from minimum setting **until every pacer spike is immediately followed by a wide QRS and a broad T wave** – This is termed as **Electrical Capture**.
9. Confirm by checking the patient's **femoral pulse** to see if the pulse rate matches the rate set above i.e. 60-70bpm. This is termed as **Mechanical Capture**.
10. Recheck the patient's vital signs and confirm the patient's signs of shock are resolving i.e. increase in blood pressure, improved mentation, etc. This is termed as **Physiological Capture**.
11. If all the above is achieved, increase the current milliamperes by **10%** for safety margin
12. Set the **Mode** to '**Fixed mode**'
13. Transfer care to a **Cardiologist** without delay. **DO NOT STOP PACING** unless instructed to by a **Cardiologist**.

Trouble Shooting

- **Pacing Spikes not seen on the base line** – Confirm that you have pressed the **START** button
- **No Electrical Capture** – Confirm that the pads are firmly pressed on the patient's chest. Continue increasing the milliamperes. There is no set minimum or maximum.
- **No Mechanical Capture** – Increase the milliamperes by increments of 5-10mA and recheck the pulse
- **No Physiological Capture** – Consider hypovolaemia as the cause of shock and give a small fluid bolus (250-500mls) and recheck the patient. If not, increase the set rate to 80bpm, confirm electrical capture and mechanical capture and recheck the patient
- **In all cases, consult a Cardiologist.**

Transferring a patient to another transcutaneous pacer (Handing Over Pacing)

1. **DO NOT** disconnect the patient from the **original pacing machine**
2. Set the **original pacing machine** to '**Demand mode**'

The following steps are performed on the new pacing machine;

3. Place a **new set of pacing pads** on the chest of the patient in the **anteroposterior position**. Place the anterior pad directly over the heart at the precordium to the left of the lower sternal border; place the posterior pad under the patient's body beneath the heart and immediately below the scapula.
4. Connect the pads cable to the **new pacing machine** if not already connected
5. **Turn the pacer ON.** Observe for **markers (*)** indicating the R-wave on the screen. Some machines require that you **START pacing** after turning the pacer on. Observe for **pacing spikes (|)** on the baseline.
6. Set the **Rate** higher than the rate in the original pacing machine e.g. **80-90 bpm**.
7. Set **current milliamperes (mA)** output as follows: Increase milliamperes (mA) from minimum setting **until every pacer spike is immediately followed by a wide QRS and a broad T wave** – This is termed as **Electrical Capture**.
8. Confirm by checking the patient's **femoral pulse** to see if the pulse rate matches the rate set above i.e. 80-90bpm. This is termed as **Mechanical Capture**.
9. Recheck the patient's vital signs and confirm the patient's signs of shock are resolving i.e. increase in blood pressure, improved mentation, etc. This is termed as **Physiological Capture**.
10. If all the above is achieved, increase the current milliamperes by **10%** for safety margin
11. At this point, the **original pacing machine** will be in a '**Standby mode**'
12. Disconnect the **original pacing machine**
13. Reduce the rate on the **new pacing machine** to the rate set in the original pacing machine e.g. 60-70 bpm
14. Set the **Mode** to '**Fixed mode**'
15. Transfer care to a **Cardiologist** without delay. **DO NOT STOP PACING** unless instructed to by a **Cardiologist**.