VASOVAGAL: SYNCOPE/ BRADYCARDIA

(This protocol should be used in conjunction with the mandatory annual basic life support training that all staff must attend)

- Inadequate oxygenation and blood flow to the brain results in loss of consciousness
- This may occur with a low blood pressure caused by vagal overactivity (a vasovagal attack, simple faint, or syncope) which slows the heart rate significantly (bradycardia)
- This can follow emotional stress, pain or specifically after cervical dilatation and instrumentation of the uterus
- Some patients are more prone to this and have a history of repeated faints
- Loss of consciousness associated with inadequate cerebral perfusion can be associated with a brief period of twitching or seizure-like activity. This is invariably self-limiting and resolves as the bradycardia is treated.
- Under stressful circumstances, many anxious patients hyperventilate. This may give rise to feelings of light-headedness or faintness but does not usually result in syncope. It may result in spasm of muscles around the face and of the hands. In most cases reassurance is all that is necessary.

Symptoms and signs of vasovagal syncope

- Patient complains of feeling faint / dizzy / light headed
- Slow pulse rate / bradycardia (feel for pulse in groin if exposed, listen to heart with a stethoscope or look/listen to the pulse oximeter if attached)
- Low blood pressure
- Pallor and sweating
- Nausea and vomiting
- Loss of consciousness

Treatment

See Resus Council Bradycardia Algorithm

1. Call for help/ push emergency buzzer
2. Use **ABCDE** approach **(A**irway, **B**reathing, **C**irculation, **D**isability, **E**xposure)
3. **Stop** further **manipulation** / **dilatation of cervix** / **instrumentation** of the uterus
4. Assess the patient
5. Lay the patient flat **as soon as possible** and raise the legs to improve venous return (if not already)
6. Give oxygen (10-15 litres per minute) when availableMost vasovagal / syncopal attacks will resolve with the above measures.

7. Observe the patient – keep them lying down until they feel better.
8. If the patient continues to show significant signs of shock, a reduced conscious level and the pulse (by palpation, auscultation or pulse oximeter reading) remains slow (bradycardia<60/min) then the use of **atropine** is warranted **for those trained in gaining IV access** (see further on if not trained in IV access).

The heart rate will usually increase within a few minutes.

The majority of patients will not usually manifest persistent, significant signs unless the heart rate remains 40/min or less.

Atropine 500 microgram intravenous (IV) single dose, followed by saline flush

Improvement

- If the patient responds quickly and effectively to the initial dose of atropine the decision to call for further assistance e.g. emergency services will depend on the experience of the healthcare staff present.
- Many patients will be well enough to go home after a brief period of time under observation (determined by the healthcare provider).

NO improvement (remain symptomatic or unwell)

- Emergency assistance must be summoned and a further IV dose of 500 IVmicrograms atropine given.
- The ambulance responders will decide whether further treatment and/or transfer to hospital is necessary.

For those **staff unable (or not trained) to gain IV access**

Single dose of Atropine (500micrograms) can be given intramuscularly (IM).

This should be given **mid-thigh with a long enough needle** to ensure correct intramuscular placement.
The increase in heart rate following IM atropine is significantly slower than after IV atropine and can take several minutes.

Improvement

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- Many patients will be well enough to go home after a brief period of time under observation (determined by the healthcare provider).

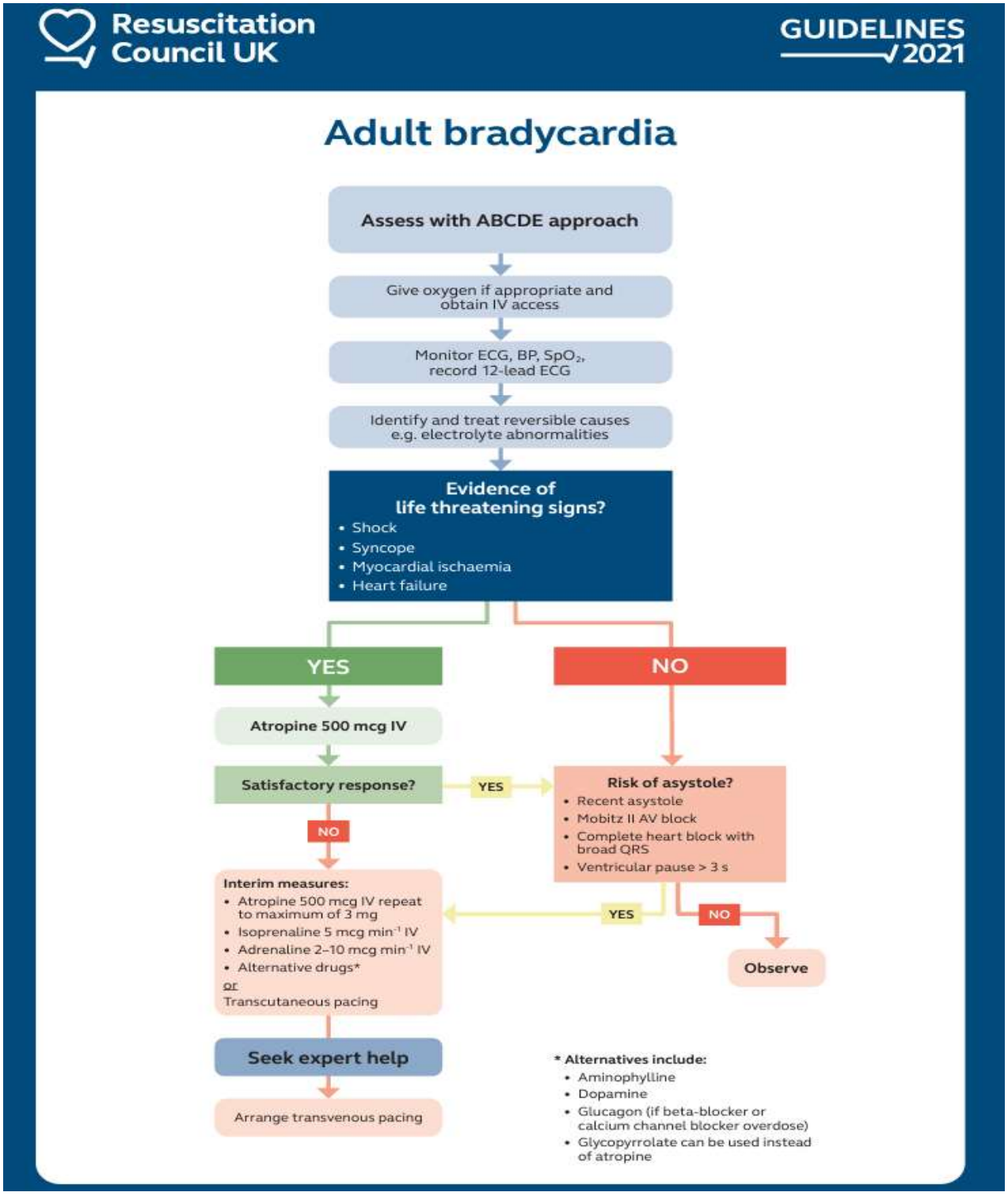
NO improvement (remain symptomatic or unwell)

- Emergency assistance must be summoned If the patient's condition deteriorates or there is no improvement within 10 minutes call 999, a further dose of IM atropine (500micrograms) can be given whilst awaiting the arrival of an ambulance.

- If any patient becomes unresponsive, always check for 'signs of life' (breathing, circulation) and start CPR in the absence of signs of life or normal breathing (ignore occasional gasps). Call 999.

If 'signs of life' are present i.e. the patient is breathing normally but remains unconscious, then ensure that they are in the full recovery position.

Appendix One: Resusicitation Council Adult Bradycardia Algorithm



ReferenceFSRH Service Standards for Resuscitation 2022 (Accessed 3 Sept 24)
Resuscitation Guidelines 2021. Resuscitation Council (UK)
Resuscitation Council Bradycardia Algorithm 2021.pdf (resus.org.uk) (Accessed 3 Sept 24)