## Medication Safety memo – 3<sup>rd</sup> July 2019



## **Amiodarone Infusions**

Amiodarone is used for the treatment of arrhythmias, particularly when other drugs have been ineffective. It is also the first line chemical intervention in stable adult tachycardia particularly with broad complex QRS tachyarrhythmia's.

The recommended doses of amiodarone can be accessed through the trust formulary on the intranet: http://www.ekhuftformulary.nhs.uk/

## The method of administration recommendations are as follows:

- 1. In case of cardiac arrest, the use of a peripheral loading dose of amiodarone is acceptable, as per the Resuscitation Council Advanced Life Support Treatment algorithm. Clearly if central line access has been obtained during the resuscitation procedure, then the amiodarone should be given through the central line but if not it should be given through the peripheral line. Ideally the peripheral line should have been established during the arrest situation in a large vein.
- 2. In cardiac arrest situations the unlicensed interosseous route is acceptable by medical staff specifically trained with respect to the device used and where no other access is available. Current considerations are the evidence that amiodarone can reduce the number of cardioversion shocks required without evidence of an effect on long term outcome and that there is a 12% extravasation rate associated with the interosseous route. While necrotic wounds have been rarely reported after cardiopulmonary resuscitation with co-administration of medications via the interosseous route no association with amiodarone given alone has yet been reported. Accordingly all such wounds should be reported via the MRHA yellow card system.
- 2. For non-cardiac arrest scenarios, then amiodarone administration should only take place in appropriate clinical areas, ie coronary care, ITU or in resuscitation rooms, if the patient is deemed to have unstable cardiac arrhythmias which may progress to a peri-arrest or cardiac arrest scenario if not treated urgently. In this situation the amiodarone infusion should ideally be given through either a PICC line or through a central line (this would not include peripheral long-lines).
- 3. If central venous access is not possible the only acceptable peripheral line is one established in a large proximal vein (eg. one that would be used for PICC access). Peripheral access where the province of the access is unknown is not acceptable. Concentrations exceeding 2mg in 1ml should always be given via central venous access device except in extreme clinical emergency (dilution should not exceed 3mg/ml).
- 4. The vascular access insertion site should be monitored extremely closely, especially if a peripheral site has been used. Adverse local effects could include thrombophlebitis and phlebitis and the risk of these is linked to concentration and frequency of the infusion. The risk of extravasation is increased with peripheral access and if unnoticed this is likely to lead to severe local tissue necrosis and possible muscle necrosis if the infusion is continued.



Dr Jenkinson, Lead Clinician Drug and Therapeutics Jackie Shaba, Medication Safety Officer j.shaba@nhs.net



For further information please:

Discuss with your clinical pharmacist Call Medicines Information on 723-6001 Utilise Trust formulary to access safety information on a medicine <a href="http://www.ekhuftformulary.nhs.uk/">http://www.ekhuftformulary.nhs.uk/</a>