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Email:

Dear,

I am writing in response to your enquiry under the Freedom of Information Act 2000 (FOIA) reference FOI 20/10/19.

You requested the following information, please also see our response below:

**Does your service currently utilise a protocol, patient-group directive [PGD] or other means to facilitate Paramedics working in the pre-hospital setting to administer adrenaline to patients following return of spontaneous circulation [ROSC] after out-of-hospital cardiac arrest for the purposes of correcting hypotension?**

- If yes –

This is predominately for Critical Care Paramedics only and the following is from the Critical Care Paramedic Clinical Management Plan. There is legacy guidance for the use of 100mcg boluses with clinical support for Paramedics however this is rarely used and is under review. This support does not include permission to administer or to delegate administration.

- **What are the indication and exclusion criteria for this?**

>>> Adults and children who are post ROSC / in cardiogenic shock and have a low cardiac output unresponsive to standard treatment.

>>> **Exclusion:** Known hypersensitivity to adrenaline injection or any of the excipients (sodium chloride, water for injection, sodium metabisulphite, hydrochloric acid and sodium hydroxide).-Adults: tachycardia over 110bpm-Children: heart rate over upper value listed in JRCALC 'page for age'.-Frequent (one or more a minute) ventricular ectopic beats.

- **What is the recommended dose and administration route?**
  - >>> Bolus dose - 10mcg-50mcg.
  - Infusion -  
(Adult) - 10mcg/min (1ml/min; 60ml/hr) given by infusion pump. May increase/decrease in intervals of 5mcg/min (0.5ml/min; 30ml/hr) titrated to response.
  - (Children) - 0.1mcg/kg/min given by infusion pump.
- **If this dose differs from the 100mcg increments recommended by the Resuscitation Council (United Kingdom) what is the rationale for this?**

100mcg is a large dose for this purpose and differs to standard critical care & emergency practice. The evidence base for the 100mcg dose does not exist and the guidance is likely based on convenience, i.e. 1ml of 1:10,000, whereas to give smaller doses the adrenaline requires dilution to 1:100,000.
- **Are Paramedics required to contact senior support (such as by telephone) prior to administering post-ROSC adrenaline?**

Paramedics under legacy guidance yes. CCPs no other than children under 12
- **Are you able to share any relevant documentation such as PGDs?**

Adrenaline falls under Schedule 17 of the Human Medicines Regulations and therefore does not require a PGD. The CMP discussed is under review at the time of writing.
- **If no –**
  - **What is the rationale for not implementing such a protocol/PGD/or other standard operating procedure (i.e. availability of pre-hospital critical care teams)?**

N/A

I hope you find this information of some assistance.

If for any reason you are dissatisfied with our response, kindly in the first instance contact Caroline Smart, Head of Information Governance via the following email address:

[FOI@secamb.nhs.uk](mailto:FOI@secamb.nhs.uk)

Yours sincerely

Freedom of Information Coordinator  
South East Coast Ambulance Service NHS Foundation Trust

