Network Guideline for the Provision of Blood to Scene

Introduction

The blood to scene pathway is intended to provide packed red blood cells to a patient in the pre-hospital environment who is likely to suffer severe harm from hypovolaemic and anaemic shock despite all other measures of haemorrhage control, controlled crystalloid resuscitation and rapid transfer being implemented. These patients would typically include prolonged entrapment with ongoing uncontrollable bleeding (internal or external) where rapid extrication to the nearest hospital is not possible, or where long transfer times to an MTC are anticipated and blood can be intercepted en route in a timely fashion. Request for blood will come from on scene pre-hospital doctors via the regional trauma desk.

If you require blood to be sent to scene, please follow the steps below:

1. Activate the Major Haemorrhage Protocol / Code Red or equivalent policy as a pre-hospital activation in the usual way.

2. Nominate a communication person in ED that can be the direct link between Blood Bank and ED

3. Immediately inform Blood Bank that blood is required to be sent to scene. Please give as much detail about the patient as possible. This should include age and gender, reason for request and likely requirements for blood products. Internal policies will determine the processes for collecting blood from the laboratory and for transfer to the Emergency Department.

4. MHP Pack 1 (e.g. 4 O Neg RBC and 2 Plasma) will be prepared for collection unless alternative quantities are requested by the clinical area. Each hospital trust should define the contents of the pack according to local procedures and be explicit in their communication with the scene clinicians about what products are being supplied.

5. Transport to scene will be co-ordinated by the Regional Trauma Desk.

6. It is extremely important to maintain communication with Blood Bank if further products are required.

7. Maintaining traceability records is required by UK law and enforced by the MHRA. The clinician at the scene takes responsibility for all blood products sent to scene and are they are responsible for traceability. All green slips sent with the blood products must be completed and returned to Blood Bank as soon as possible.

8. All blood transport boxes sent to scene must be returned to Blood Bank as soon as possible.

9. If more than one patient is involved this must be communicated to Blood Bank.

Appendix 1

Example of blood to scene from UHB. Other MTC's (TU's) will have their own specific internally processes for preparing blood to scene.

Process and Preparation

The blood is packed in appropriate containers which maintain the blood at requisite temperature (fig. 1). Each box contains two bags of O negative red cells and two wristbands. The paperwork on the front includes a sticker from the unique identifier for each unit of blood. (fig. 2) Opening the box reveals a protective panel (fig. 3) and then an insulation panel (fig. 4) which are removed.

Fig.1

Fig.2

Fig.3

Fig.4

The cool bag is removed (fig. 5) and this will then expose the device for securing the labels (fig. 6) and the labels themselves (fig. 7). The labels are attached to the blood bag as shown in Fig. 8.

Fig. 5

Fig. 6

Fig. 7

Fig.8

Please note, that the label can only be detached from the blood using a pair of scissors. This unique identifier and/or blood donation number which will attribute to that patient receiving that unit of blood must be secured to the patient's wrist using the wristband provided (Fig. 9 and Fig. 10). The Signatrol Tempit tag for providing a record of the temperature compliance for storage. (Fig.11)

Fig. 9

Fig. 10

Fig. 11

If the blood is transfused, the wristband for that unit of blood should be sent back to the Blood Bank as soon as practicably possible.

Any blood not transfused within 4 hours of the box being opened must be taken down and discarded. Medics on the scene must use judgment about reducing this time if the local temperature exceeds normal ward room temperature.

This system will allow the doctors at the scene to give blood to more than one patient. It is anticipated that the patient is likely to return to the MTC from where the blood is originated. Should this not be the case, there should be sufficient paperwork to be taken forward through local transfusion services to record blood usage.

Blood boxes should be returned as a matter of urgency via the helicopter / MERIT or the scheme that initiated the request for blood to scene.

December 2017