

**Blood administration Workbook**



Self directed Learning Pack

If you require further information contact:

Blood transfusion Nursing Team

Extension 4223

**Name:**

**Dept:**

**Extension No:**

This self-directed learning package is designed to help you identify and investigate some of the issues associated with blood transfusion administration in the clinical setting.

Once completed it can form part of the evidence you require to support your claim of competence in blood administration, whether this be a refresher or a new skill.

Your answers will be checked and your book will be returned to you.

The learning package is designed to:

* Reflect on existing experience
* Access and read the core documents that will guide your practice
* Investigate some of the issues associated with Blood transfusion administration
* Identify gaps in your own knowledge and areas for development
* Focus on risk management issues

**Policies and guidelines**

You will need to refer to the following websites and guidelines to complete this workbook:

* Administration of Blood and Blood Components within the Great Western Hospitals - Clinical Guideline (GWH intranet)
* Serious Hazards of Transfusion (SHOT)- www.shotuk.org
* The Investigation and Management of Transfusion Reactions and Serious Adverse Events – Clinical Guideline (GWH intranet)
* Roles and Accountability of Staff involved in the process of Blood Transfusion Clinical Guideline (GWH intranet)
* Handbook of Transfusion Medicine www.transfusionguidelines.org.uk/transfusion-handbook

Section 1- Transfusion Guidelines

* 1. **State the key purpose of transfusion guidelines**. (1 mark)
  2. **State where you can access the transfusion guideline documents.** (1 mark)
  3. **State five staff groups involved in the transfusion pathway, from blood sampling to final administration of the blood component.** ( 5 marks) **What are their main roles?** (5 marks)
  4. **What does the acronym SHOT mean? List two examples of events that should be reported.** (3 marks)

Section 2- Blood groups

2.1 **Complete the following table** (8 marks)

|  |  |  |
| --- | --- | --- |
| Basic Blood group types | | |
| Patient Bld group | Antigens on Red cell | Antibodies on plasma |
| A |  |  |
| B |  |  |
| O |  |  |
| AB |  |  |

2.2 **Complete the following table (tick or cross which Patient group can safely have which type of Blood and Fresh Frozen Plasma (FFP)** (18 marks)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Component** | **Red blood cells** | | | | **Plasma (FFP)** | | | |
| **ABO group** | **O** | **A** | **B** | **AB** | **O** | **A** | **B** | **AB** |
| Patient O |  |  |  |  |  |  |  |  |
| Patient A |  |  |  |  |  |  |  |  |
| Patient B |  |  |  |  |  |  |  |  |
| Patient AB |  |  |  |  |  |  |  |  |

2.3 **Complete the following table** (3 marks)

|  |  |
| --- | --- |
| **COMPONENT** | **What is it used for?** |
| Red Blood Cells (RBCs) |  |
| Fresh Frozen Plasma (FFP) and Cryoprecipitate |  |
| Platelets |  |

Section 3- Blood Administration

3.1 **Is written consent for transfusion legally required? What are the legal requirements?** (2 marks)

3.2 **What are the four points of patient ID, essential for safe blood administration?** (2 marks)

3.3 **What two types of labelling are acceptable on blood transfusion request forms and sample tubes?** (2 marks)

3.4 **List four items of equipment required to transfuse a blood component from the bag into the patient’s blood stream.** (4 marks)

3.5 **When should the blood component administration set be changed? List 3.** (3 marks)

3.6 **Where can blood be stored at GWH?** (1 mark)

3.7 **What are the four main blood components that the Blood transfusion laboratory issue? And how are they each stored?** (8 marks)

3.8 **What patient observations are the national minimum standard when administering a blood transfusion? When should they be carried out?** (4 marks)

Section 4- Transfusion reactions

4.1 **List four types of transfusion reactions that you are likely to see.** (4 marks)

4.2 **Describe signs and symptoms associated with transfusions reactions- List 5.** (5 marks)

4.3 **Describe what you should do in the event of suspecting a major transfusion reaction (minimum of 5 actions).** (5 marks)

**Scenario 1** (2 marks)

* *Following handover to the night shift, the staff nurse noticed that a transfusion of red cells that had been commenced at 15:30 was still being infused at 23:00.*
* *After the start of the transfusion the patient had been transferred from the assessment unit to the adult medical ward.*

**State the areas where errors were made and how they could be avoided:** (2 marks)

**Scenario 2** (4 marks)

* Blood was delivered to the ward for patient X but had not been handed over to a nurse.
* Patient Y on this ward had arrested following sudden haematemesis.
* The unit for patient X was put on the bed of Patient Y.
* Emergency O RhD negative had been ordered for Patient Y and because the unit for patient X was group O it was assumed that this blood was the urgent blood ordered for patient Y.
* The blood was not checked against details for patient Y and was transfused.
* Patient Y was group B RhD positive and the unit group was O RhD positive and therefore the unit was fortuitously compatible.
* Patient Y was transferred to ITU post arrest and survived.

**- assumption that blood was emergency and no pt id checks**

**State the areas where errors were made and how they could be avoided:**

**Total marks awarded:** (Out of 90)

**Comments:**