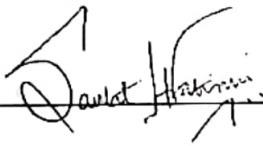





**Aqa Khan University Hospital**

<b>Title:</b>	Auto Blood Transfusion		
<b>Department / Division:</b>	Anaesthesiology / Operating Room		
<b>Approved By:</b>	<b>Document No.:</b>	OR-PP-018	
<b>Section Head, Cardio-thoracic Surgery</b>		<b>Issuance Date:</b>	May 01, 1998
<b>Chief Perfusionist. Operating Room</b>		<b>Revision Date:</b>	July 24, 2023
		<b>Revision No.:</b>	07
		<b>Prepared By:</b>	OR Team
		<b>Total Pages:</b>	03

**1. Purpose(s):**

- 1.1. Patients who are being operated for cardiac surgery and having actual or potential risk of the following nature
  - 1.1.1. To transfuse patient's own blood without delay in critical situations
  - 1.1.2. To avoid risk of transfusion reaction
  - 1.1.3. To provide instant replacement in case of massive bleeding when blood bank is unable to provide banked blood, or in case of a rare blood group e.g. Rh - ve D-antigen

**2. Scope:**

- 2.1. Actual or potential risk of the following nature:
  - 2.1.1. To transfuse patient's own blood without delay in critical situations
  - 2.1.2. To avoid risk of transfusion reaction
  - 2.1.3. To provide instant replacement in case of massive bleeding when blood bank is unable to provide banked blood, or in case of a rare blood group e.g. Rh - ve D-antigen

**3. Responsibility:**  
Perfusionist.

**4. Terms & Definition:-**

- 4.1. Potassium chloride (KCL)– Checked for hyperkalemia & hypokalemia status in the body
- 4.2. Bicarbonate (HCO<sub>3</sub>)– Checked for alkototic & acidotic status in the body
- 4.3. Calcium chloride (CaCl)– Checked for calcium(ionized) level in the body
- 4.4. Hemoglobin (Hb)- Checked for hemoglobin level in the body

**5. Process/ Process:-**

<b>Steps</b>		<b>Rationale</b>	
5.1	Ensure that cell saver is working at all time	5.1	To handle blood loss in emergency situation.
5.2	The physician or his designated assistant informs the Perfusionist about the potential requirement of auto-transfusion.	5.2	Facilitates availability and quick preparation.
5.3	Perfusionist verifies by physician or his/her designated assistant about the patient's diagnosis and surgical procedure.	5.3	To assure that it is safe to use autologus blood.
5.4	Autologus blood is transfused to the patient within 6 hours of collection.	5.4	Clotting and red cell destruction begins after 6 hours.
5.5	Blood filter is used for transfusion.	5.5	To avoid transfusion of micro-particles (safety of patient).
5.6	Complete the document in the auto-blood transfusion record book.		
<b>NOTE: Do not apply pressure for fast transfusion.</b>		<b>NOTE: As material of the bag is thin and there is a risk of rupture.</b>	

**6. References:**

Gravlee, G.P., Davis R.F., Kurusz, M., & Utley, J.R (2000). Cardiopulmonary Bypass: Principles and Practice. (2ndedition). New York: Lippincott Williams & Wilkins.

Cardiopulmonary Bypass: Principles and Practlice. 3rd Edition (2008).By Glenn P. Gravlee

**7. Annexure:**

**Document Change Record:**

<b>Review #</b>	<b>Review Date (dd-mm-yyyy)</b>	<b>Description Of Change</b>	<b>Identification of Change</b>
04	06-Jun-2015	Change in new format	Choose an item
05	01-Feb-2016	Formatting as per service line. Change in document no.	-
06	01-Feb-2019		
07	24-July-2023	Formatting as per Department / Division	