





Aga Khan University Hospital

Title:		Changing an Oxygenator	
Department / Division:		Operating Room	
Service Line		Anesthesiology, OR , CSSD (SL-C)	
Approved By:		Document No.:	SLC-OR-PP-015
Director, Thoracic Cardiovascular Services		Issuance Date:	January 01, 1997
Chief Perfusionist, Operating Room		Revision Date:	February 01, 2019
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1. **Purpose(s):**
In the event when the Oxygenator fails to exchange gases or oxygenate blood during cardiac surgery
2. **Scope:**
To provide oxygenated blood to the patient during cardiopulmonary bypass surgery.
3. **Responsibility:**
Cardiac Perfusionist / Assistant Cardiac Perfusionist II who demonstrate competency.
4. **Terms & Definition:-**
5. **Process/ Process:-**

Steps		Rationale
5.1	MEMBRANE OXYGENATOR:	
	5.1.1 Inform anaesthetist and surgeon about the problem and what you plan to do.	
	5.1.2 Cool the patient if time permits.	5.1.2 It allows extra time for procedure.
	5.1.3 Close the arterial line filter, turn off the venous line and double clamp the inlet line of the Oxygenator's inlet port.	

Steps	Rationale
5.1.4 Aseptically, cut the line between clamp and attach the line to the inlet port of the new Oxygenator.	5.1.4 To prevent infection.
5.1.5 Remove the clamps from the inlet and cardiotomy lines. Slowly fill the Oxygenator to the correct level.	
5.1.6 De-bubble the circuit.	
5.1.7 Resume bypass safely.	
5.1.8 Correct hematocrit and blood gases as required.	5.1.8 To keep at hemodynamically and physiologically safe level.
5.1.9 Attach the water lines and monitoring equipment as time permits.	

6. References:

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

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

7. Annexure:

Document Change Record:

Review #	Review Date (dd-mm-yyyy)	Description Of Change	Identification of Change
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