



HEALTH HOLDING

HAFER ALBATIN HEALTH  
CLUSTER  
MATERNITY AND  
CHILDREN HOSPITAL

<b>Department:</b>	Pediatrics		
<b>Document:</b>	Multidisciplinary Policy and Procedure		
<b>Title:</b>	Pediatric Defibrillation		
<b>Applies To:</b>	All Pediatric Staff		
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## 1. PURPOSE:

- 1.1 To terminate ventricular fibrillation or pulseless ventricular tachycardia.
- 1.2 To perform synchronized cardio version.

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## 2. DEFINITIONS:

- 2.1 **Defibrillation** – the passing of an electrical shock of short duration through the heart to terminate tachy dysrhythmias.
- 2.2 **Defibrillator** – an instrument by which normal rhythm is restored in ventricular or atrial fibrillation by the application of a high voltage electric current.
- 2.3 **Cardioversion** – is a synchronized administration of shock during the R waves or QRS complex of a cardiac cycle and restore a rapid heartbeat back to normal.

## 3. POLICY:

- 3.1 Defibrillation should be performed by PALS / BLS certified medical staff.
- 3.2 Only the prescribed energy level should be delivered to the patient.
- 3.3 Machine must be kept charge at all time.
- 3.4 All staff in the unit should be familiar regarding the operation and precautions in using the machine.
- 3.5 All accessories of defibrillator should be available at all times.
- 3.6 Preventive maintenance is a must.
- 3.7 Any malfunction in the machine should be reported immediately to the Biomedical Engineer.
- 3.8 Test load for energy charging should be done every shift by unit head nurse and document in a sheet.  
Joule delivery system must be checked by:
  - 3.8.1 Charging defibrillator to 100 joules and discharging paddles.
  - 3.8.2 Charging defibrillator to 200 joules and discharging paddles.
  - 3.8.3 Charging defibrillator to 360 joules and discharging paddles.
- 3.9 Ensure patient cable is attached to monitor at all times.
- 3.10 Paper roll must be checked and monitor run for 3 - 5 seconds on testing paper must be done.

## 4. PROCEDURE:

- 4.1 Defibrillator as per BLS/PALS protocol.
- 4.2 Removed the plug of defibrillates from the electric socket.
- 4.3 Power on the defibrillation and follow the steps.
- 4.4 Attached defibrillator pad's to the patient bare chest.
  - 4.4.1 Usually position pads or paddles over sternum and apex.
- 4.5 "Clear" the patient and allow the defibrillator/AED (Automated Electrical Defibrillator) rhythm.
  - 4.5.1 When AED prompts you, clear the victim during analysis. Be sure that no one is touching the patient, not even the rescuer in charge of giving births.
- 4.6 Loudly state "Clear" three times to avoid hazards of shock to others.

- 4.7 Press the shock button.
  - 4.7.1 Monophasic or Biphasic: 2 joules/kg for the first attempt and 4 joules/kg for subsequent attempts.
- 4.8 Code sheet should be filled if the machine used signed by team leader.
- 4.9 Proper procedure sedation and analgesia should be used.
- 4.10 Maintain the cleanliness and readiness of the machine and unit for next used.
- 4.11 Return the instrument and plug the power cord into an AC power outlet. Ensure that the battery charge and AC power lights are ON.
- 4.12 Check the sufficient recorder paper, electrode gel; defibrillator pads are available for the next use.

## **5. MATERIALS AND EQUIPMENT:**

- 5.1 Defibrillator Machine
- 5.2 Power Code
- 5.3 ECG Cable
- 5.4 Electrode Paddle Set Pedia
- 5.5 Recorder Paper
- 5.6 Electrode Gel
- 5.7 External Pacer

## **6. RESPONSIBILITIES:**

- 6.1 Physician
- 6.2 Nurses
- 6.3 Biomedical Engineering

## **7. APPENDICES:**



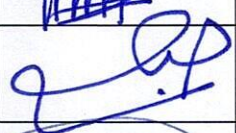




N/A

## **8. REFERENCES:**

- 8.1 Kingdom of Saudi Arabia, Ministry of Health, 2013.
- 8.2 SHA, ACLS and PALS Protocols



# 9. APPROVALS:

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