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| Department: | Maternal Intensive Care Unit | | |
| Document: | Departmental Policy and Procedure | | |
| Title: | Use of Pulse Oximetry in Maternal Intensive Care Unit | | |
| Applies To: | All Maternity Intensive Care Unit Staff | | |
| Preparation Date: | January 12, 2025 | Index No.: | ICU-DPP-006 |
| Approval Date: | January 26, 2025 | Version: | 2 |
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1. PURPOSE:

- 1.1 To provide guidelines on how to use pulse oximeter.

2. DEFINITIONS:

- 2.1 **Pulse Oximeter** – to monitor the patient's arterial oxygen saturation (SaO₂) by measuring the absorption amplitude of light waves as they pass through areas of the body that are highly perfused by arterial blood and monitor pulse rate and amplitude.

3. POLICY:

- 3.1 Make sure the patient isn't wearing false fingernails, and removed any nail polish from the test finger.

4. PROCEDURE:

- 4.1 Explain the procedure to the patient.
- 4.2 Index finger is commonly used; a smaller finger may be selected if the patient finger is too large for the equipment.
- 4.3 Place the transducer (photo detector) probe over the patient's finger so that light beams an sensor oppose each other.
- 4.4 If the patient has long fingernails, position the probe perpendicular to the finger, if possible cut the finger nails.
- 4.5 Position the patient's hand at heart level to eliminate venous pulsation and to promote venous pulsation and accurate reading.
- 4.6 Turn on the power switch. If the device is working properly, an alarm will sound, display light and pulse search light will flash.
- 4.7 The SPO₂ and pulse rate displays will show stationary zeros. After four to six heartbeats, the SPO₂ and pulse rate display will supply information with each beat, and the pulse amplitude indicator will begin tracking the pulse.
- 4.8 Normal Value Range for Adult – 95% to 100%.
- 4.9 If the SaO₂ level or pulse rate varies from present limits, the monitor triggers visuals and audible alarms.
- 4.10 The pulse rate on the pulse oximeter should correspond to the patient's pulse. If the alerts don't correspond, the saturation reading can be considered not accurate. Assess the patient, check the oximeter and reposition the probe.
- 4.11 If they're sufficient to produce a signal, check following problems, sensors are properly aligned, make sure that wires are intact and secure, pulse oximeter is plugged into a power source.
- 4.12 Document the procedure, including the date, time procedure type, oxygen saturation, and any action taken.
- 4.13 After the procedure remove the probe, turn off and unplug and monitor, and clean the probe by gently rubbing with alcohol swab.

6. RESPONSIBILITIES:

6.1 Nurse

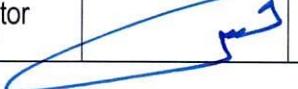
7. APPENDICES:

N/A

8. REFERENCES:

8.1 Guidelines for Adult ICU Care/ Ministry of Health, General Directorate of Health Centers- Riyadh, 2013

9. APPROVALS:

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