
Forsyth County EMS

Skill Procedure: Pulse Oximetry

	MR / EMT	
	Expanded Scope EMT	
	EMT-I	
	EMT-P	

Clinical Indications:

- A. Patients with suspected hypoxemia.

II. Procedure:

- A. Turn the machine on and allow for self-tests.
- B. Apply probe to patient's finger or any other digit as recommended by the device manufacturer.
- C. Allow machine to register saturation level.
- D. Record time and initial saturation percent on room air if possible on/with the patient care report (PCR).
- E. Verify pulse rate on machine with actual pulse of the patient.
- F. Monitor critical patients continuously until arrival at the hospital. If recording a one-time reading, monitor patients for a few minutes as oxygen saturation can vary.
- G. Document percent of oxygen saturation every time vital signs are recorded and in response to therapy to correct hypoxemia.
- H. In general, normal saturation is 97-99%. Below 94%, suspect a respiratory compromise. Below 92% in COPD patients.
- I. Use the pulse oximetry as an added tool for patient evaluation. Treat the patient, not the data provided by the device.
- J. The pulse oximeter reading should never be used to withhold oxygen from a patient in respiratory distress or when it is the standard of care to apply oxygen despite good pulse oximetry readings, such as chest pain.
- K. Factors which may reduce the reliability of the pulse oximetry reading include:
 - 1. Poor peripheral circulation (blood volume, hypotension, hypothermia)
 - 2. Excessive pulse oximeter sensor motion
 - 3. Fingernail polish (may be removed with acetone pad)
 - 4. Carbon monoxide bound to hemoglobin
 - 5. Irregular heart rhythms (atrial fibrillation, SVT, etc.)
 - 6. Jaundice

Certification Requirements:

Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the local EMS System. Assessment should include direct observation at least once per certification cycle.

Approved by:
Dr. R.L. Alson
Medical Director
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