NOR-CAL EMS	1805	Adult Video Laryngoscopy for Approved Ground Providers
Nor-Cal EMS Policy & Procedure Manual		Procedures
Effective Date: November 3, 2021		Next Revision: November 3, 2023
Approval: Jeffrey Kepple MD – MEDICAL DIRECTOR		SIGNATURE ON FILE

Authority:

Health and Safety Code Division 2.5, California Code of Regulations, Title 22, Division 9.

Purpose

To guide the use of adult video assisted laryngoscopy for approved NorCal EMS providers when direct laryngoscopy is less desirable or contraindicated. *This policy applies only to approved provider agencies and qualified paramedics meeting the requirements for optional scope practice.*

Policy

Indications *(One or more of the following):*

1. Full arrest requiring airway control.
2. Unresponsive patient with failure to ventilate.
3. Lack of gag reflex with the inability or predicted inability to control or protect the airway.
4. Required airway control in an unresponsive patient with suspected spinal fracture or high risk for a highly contagious respiratory contagion (ie, COVID-19, etc.) when direct laryngoscopy would place the provider/patient at increased risk.
5. Failed direct laryngoscopy or supraglottic airway placement.

Contraindications *(Any of the following):*

1. Video laryngoscope model or use has not been approved by NorCal EMS for the provider agency.
2. Responsive patients with an intact gag reflex (Patient must be in full arrest or unresponsive and not able to maintain a patent airway).
3. Provider is unfamiliar with the video laryngoscope.

Cautions:

1. Overwhelming fluid in the airway (blood/vomit will obscure camera view).
2. Operator inexperience.

Equipment

1. Appropriate PPE.
2. Video laryngoscope with appropriately sized blades:
    a. Due to numerous models, video laryngoscope models must be preapproved by NorCal EMS prior to utilization.
    b. Typically, adult video laryngoscope blades are the same as for direct laryngoscopy *(Ground ALS providers may not perform video assisted laryngoscopy on pediatric patients).*
    c. Always have one device larger and one device smaller available, if needed.
    d. Confirm the size chosen with the package insert/table as the devices vary slightly.
3. Appropriate stylet.
4. Endotracheal tubes (ETT).
5. Oxygen availability.
6. Suction supplies.
7. Bag valve mask (BVM).
8. SpO_2 and $EtCO_2$ monitors (Colorimetric $EtCO_2$ device, if $EtCO_2$ monitor not available).
9. Cardiac monitor.
10. Direct Laryngoscope or supraglottic rescue airway for rescue.

Procedure

1. Pre-oxygenate (*For non-cardiac arrest situations only*):
    a. Preoxygenate with BVM for at least eight (8) vital capacity breaths if able.
    b. If pulse oximetry of less than 95%, reinitiate ventilatory assistance with a BVM, if able.
    c. When using a BVM during pre-oxygenation, ventilate at a rate only to maintain oxygen saturation at 95% and avoid hyperventilation.
    d. Utilize passive oxygenation via NC at one (1) liter/min/kg up to max 15 liters/min during apnea and intubation attempts.

2. Position the patient: Sniffing position or apply in-line cervical spine stabilization *(not traction),* if indicated.
3. Suction oropharynx as needed. Early suction is recommended to ensure the view is not obscured.
4. Perform Video laryngoscopy (VL):
    a. Pre-bend stylet appropriately for device and ETT.
    b. Suction as needed.
        i. **Look Mouth:** Place VL centrally on tongue and gently advance until the blade has passed the posterior aspect of the tongue.
        ii. **Look Screen:** Look for epiglottis in the scope and preferably place the blade in the vallecula like standard direct laryngoscopy. Consider laryngeal manipulation.
        iii. **Look Mouth:** Gently place the ETT along the right side of the VL blade just past the posterior aspect of the tongue.
        iv. **Look Screen:** Gently manipulate the ETT through the cords, fully introducing the cuff. *(NOTE: With rigid stylets/hyperacute blades like the Glidescope, the stylet must be removed before the ETT is advanced or it will damage the anterior wall of the trachea).*

    c. Remove the stylet.
    d. Inflate the cuff.
    e. Verify placement of endotracheal intubation using a minimum of four (4) methods:
        i. Equal lung sounds bilaterally (chest rise and fall).
        ii. Mist present in ETT with exhalation.
        iii. Presence of $EtCO_2$ wave form *($EtCO_2$ capnography is the standard; however, when $EtCO_2$ is not available, an appropriate color change on colorimetric $EtCO_2$ device may be used).*
        iv. Normal SpO_2 reading.
        v. Secure the ETT using tape or a compatible commercial device.

5. Monitor placement continuously:
    a. Monitor $EtCO_2$ and SpO_2 continuously.
    b. Reconfirm placement using a minimum of four (4) methods (chest rise, lung sounds, appropriate $EtCO_2$ reading, appropriate SpO_2 reading, mist in tube, tube depth based at lip line) after every patient move.
    c. Consider the placement of gastric drainage device to facilitate ventilation and avoid regurgitation, an OG or NG tube should be placed.

6. Perform post-intubation management.

PCR Documentation

1. Document a complete procedure note:
    a. Approximate time of intubation.
    b. Video laryngoscope use and ETT size and depth.
    c. Confirmatory measures used.
    d. Complications encountered.
    e. Vital signs *(if any),* SpO_2, $EtCO_2$, ECG rhythm, and ETT confirmation at the transfer of care.

Provider agency documentation

1. Notify your management of use.
2. Provider manager will maintain a log of use and required information, per NorCal EMS.
3. Provider manager will submit required information via online form to NorCal EMS on quarterly basis for EMS Specialist and Medical Director review *(Failure to comply with these requirements will result in revocation of procedural approval by NorCal EMS).*

Quality Assurance

1. Approved management shall preform an initial training and quarterly skills review with paramedics wishing to utilize video laryngoscopy.
2. Provider management shall utilize the approved skills testing form found on the NorCal EMS website.
3. Approved agencies will maintain a log of approved paramedics and skills testing/scores (initial and review) which will be submitted to NorCal EMS on a quarterly basis for EMS Specialist and Medical Director review.