NWC EMSS Skill Performance Record

DRUG-ASSISTED VIDEO LARYNGOSCOPY INTUBATION

Name:	1st attempt:	☐ Pass	☐ Repeat
Date:	2nd attempt:	☐ Pass	☐ Repeat

Instructions: An awake adult has severe dyspnea and exhaustion from HF or asthma. Prepare equipment and intubate using DAI procedure.

Performance standard 0 Step omitted (or leave blank) 1 Not yet competent: Unsuccessful; required critical or excess prompting; marginal or inconsistent technique 2 Successful; competent with correct timing, sequence & technique , no prompting necessary	**Attempt 1 rating**	**Attempt 2 rating**
* Takes appropriate BSI precautions: gloves, goggles, mask | HEPA filter for ventilating w/ BVM		
State indications: ☐ Actual or potential airway impairment/compromise or aspiration risk that cannot be mitigated by BLS interventions ☐ Actual or impending hypoxic or hypercarbic resp. failure (apnea, ineffective ventilatory effort; $SpO_2 \leq 90$; $EtCO_2 \geq 60$) | BLS airways, NIPPV, BVM ventilations contraindicated or ineffective ☐ Increased work of breathing (WOB) (e.g., retractions, use of accessory muscles) resulting in severe fatigue ☐ Need for ↑ insp. pressure or PEEP to maintain gas exchange | NIPPV/BVM ventilations contraindicated or ineffective ☐ Need for sedation to control or effectively assist ventilations		
State contraindications/restrictions to use of sedatives: ☐ Coma with absent airway reflexes or known hypersensitivity/allergy ☐ Use in pregnancy could be potentially harmful to fetus; consider risk/benefit		
State contraindications to ETI: Severe airway trauma or obstruction that does not permit the safe placement of an ET tube		
Prepare patient ☐ **Position** for optimal view and airway access (head up to 45° unless contraindicated) ☐ Open the airway manually; *insert BLS adjuncts: NPA or OPA unless contraindicated		
Assess (to extent possible given constraints of time and pt cooperation) for S&S suggesting the pt may be **difficult to ventilate:** (MOANS": mask seal, obesity, age (elderly), no teeth, stiffness | "BONES": beard, obese, no teeth, elderly, sleep apnea/snoring.)		
Assess for S&S of difficult intubation (LEMON): Neck/mandible mobility, oral trauma, loose teeth; F/B; ability to open mouth, Mallampati view, thyromental distance; overbite		
Assess GCS, VS; SpO_2 on RA; auscultate breath sounds for baseline		
***Preoxygenate 3 minutes:** O_2 wash in; nitrogen wash out ☐ **Apply O_2 at 15 L/$ETCO_2$ NC**; maintain before and during procedure – If 2 O_2 sources add: ☐ RR ≥10 / AWAKE / good ventilatory effort: Consider CPAP at 5-10 PEEP if not contraindicated ☐ RR <10 or shallow: O_2 15 L/BVM squeeze bag over 1 sec with just enough air to see visible chest rise (~400-600mL); avoid high airway pressure (≥25cm H_2O) & gastric distention | RR 10 BPM (1 every 6 sec) to SpO_2 94% If Hx asthma/COPD: 6-8 BPM to SpO_2 92%. If SpO_2 does not meet this goal, contact OLMC. ☐ If 1 O_2 source: Sense $ETCO_2$ via NC (no O_2); give O_2/BVM until procedure starts. Then switch O_2 source to NC and run throughout ETI insertion.		
Prepare (select, check, assemble) equipment – have ready before pacing blade into mouth		
☐ BLS airways; O_2 sources; size appropriate BVM bags and masks ☐ **Suction equipmen**t (DuCanto rigid and 12-14 Fr flexible catheters); turn on to ✓ unit ☐ King Vision device & blade (curved channeled) | ETT 7.0 & 7.5 (must fit into channeled blade) ☐ Bougie; 10 mL syringe, water-soluble lubricant ☐ BP, $EtCO_2$, SpO_2, ECG monitors; commercial tube holder, head blocks or tape, stethoscope ☐ Alternate airways prepped & in sight (i-gel; cricothyrotomy) ☐ **Medications**: Ketamine, etomidate, fentanyl, midazolam (depending on pt)		
*Check ETT cuff integrity while in package; fill syringe w/ 10 mL of air; leave attached to pilot tubing		
*Assemble King Vision per standard procedure; ensure it is operational. Load ET tube into lubricated channel; load bougie inside tube. Ensure tube does not extend past channel in blade.		

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Pre-medicate during pre-ox: Pain present + etomidate being used to sedate: **FENTANYL** 1 mcg/kg (max single dose 100 mcg) IVP/IO/IN/IM; Elderly/debilitated: 0.5 mcg/kg (max 50 mcg)		
***SEDATE:** Optimum sedation evidenced by absent gag reflex (lack of eyelash reflex or response to a glabellar tap); easy up and down movement of jaw, no reaction to pressure applied to both angles of the mandible). Allow for clinical response before intubating | Estimate wt carefully **Order of preference** ☐ **KETAMINE 2 mg/kg** slow **IVP** (over one min) or **4 mg/kg IN** (NAS) **/ IM (max 300 mg) OR** ☐ Child ≥10: **ETOMIDATE 0.5 mg/kg IVP** (max 40 mg) if ketamine refused/contraindicated ☐ **If no ketamine or etomidate due to drug shortage: MIDAZOLAM** 5 mg IVP/IN + **FENTANYL** 100 mcg IVP/IN. If insufficient sedation: repeat Midazolam 5 mg IVP/IN | Additional doses require OLMC using dosing per the SOP		
Intubate:		
☐ Maintain O_2 15 L/EtCO_2 NC during procedure ☐ When ready to perform procedure: stop ventilating pt.; withdraw OPA (NPA remains) ☐ Monitor VS, level of consciousness, skin color, $ETCO_2$; SpO_2 during procedure; time elapsed		
START TIMING tube placement after last breath_____ ☐ Open mouth w/ standard technique ☐ *Insert King Vision blade midline over tongue per standard technique until epiglottis is visualized ☐ *Seat blade in vallecula; **DO NOT LIFT!** Visualize vocal cords. **Suction secretions** prn. ☐ If the distal window becomes obstructed or obscured (e.g., blood/secretions) or cords cannot be visualized, remove the blade from the patient's mouth and clear the lens, suction prn. Note: Each blade insertion into mouth = 1 attempt | Limit 2 attempts		
***Insert bougie into trachea per standard technique:** If needed, twist bougie to left or right to guide between cords. Avoid forceful insertion (tracheal trauma). *Confirm bougie placement into trachea per standard technique		
***Insert ET tube: Limit 1 attempt at ETT insertion** ☐ Maintain view with King Vision in place and advance ETT over bougie and through glottis ☐ Rotate ETT to facilitate insertion through cords into trachea if resistance met at glottic opening or cricoid ring. ☐ Advance ETT to proper depth (3 X tube ID at teeth)		
☐ ***Remove blade**: Firmly hold ETT in place; remove from channel per standard technique ☐ Turn off the display by pressing and holding the POWER button. ☐ Carefully remove bougie from the ETT.		
***Confirm tracheal placement:** Ensure adequate ventilations + oxygenation: ☐ 15 L O_2 /BVM at 10 BPM (asthma/COPD 6-8 BPM); volume & pressure just to see chest rise ☐ 5 point auscultation: Confirm absent gastric sounds + bilateral breath sounds (midaxillary and anterior chest) ☐ **Definitive confirmation**: **$ETCO_2$** number & waveform (most reliable) ☐ **Time of tube confirmation**: (Seconds of apnea)_____		
***Troubleshooting** ☐ If breath sounds only on right, withdraw ETT slightly and listen again. ☐ If in esophagus: remove ETT, re-oxygenate 30 sec; insert an i-gel ☐ **If ETT cannot be placed successfully** (2 attempts to visualize cords/1 attempt to pass tube) or nothing can be visualized; consider alternate airway (BIAD); ventilate & monitor as above | Consider need for additional medication		
If tube placed correctly ☐ *Inflate cuff w/ up to 10 mL air to proper pressure (minimal leak | avoid over inflation); remove syringe ☐ Note ETT depth: diamond level w/ teeth or gums (3 X ID ETT) ☐ *Insert OPA; align ETT with side of mouth; secure with commercial tube holder; apply lateral head immobilization ☐ *Continue to ventilate at 10 BPM (asthma 6-8); $ETCO_2$ 35-45; O_2 to SpO_2 94% (92% COPD)		
If secretions in tube or gurgling sounds with exhalation: suction ETT prn per procedure ☐ Use a flexible suction catheter; mark maximum insertion length (only inserted to the tip of the ETT and never exceed 0.5 cm beyond ETT tip to prevent mucosal irritation and injury) with thumb and forefinger ☐ *Preoxygenate patient; insert sterile catheter into the ET tube leaving catheter port open		

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☐ At proper insertion depth , cover catheter port and apply suction while withdrawing catheter ☐ Limit suction application time to 10 sec (adult). Ventilate/oxygenate patient per SOP.		
*__Reassess__: Frequently monitor SpO_2, $EtCO_2$, tube depth, VS, & lung sounds to detect displacement, complications (esp. after pt movement), or condition change. If intubated & deteriorates, consider**:** **D**isplacement of tube, **O**bstruction of tube, **P**neumothorax, **E**quipment failure (DOPE)		
***After 10 min:** Assess need for **post invasive airway sedation and analgesia** (PIASA) **– Use RASS** below If RASS (-1) or higher & SBP ≥ 90 (MAP ≥ 65) (in order of preference)**:** ☐ **KETAMINE** (pain dose**)** 0.3 mg/kg slow IVP (pain relief + sedation) unless contraindicated OLMC NOT needed for ketamine pain dose added to sedation dose that exceeds max total of 300 mg | **OR** ☐ **MIDAZOLAM** standard sedation dose + **FENTANYL** (standard dose) if restless/tachycardic (S&S pain)		
State complications of the procedure: ☐ *Post-intubation **hyper or hypoventilation**: Titrate to $ETCO_2$ ☐ ***Barotrauma:** pneumothorax & tension pneumothorax; esophageal perforation ☐ Trauma to teeth, vocal cords, larynx, trachea, mucosal, TMJ injuries, nerve injury ☐ ***Misplaced tube** (esophagus, hypopharynx, mainstem bronchus) ☐ ***Over sedation** ☐ *Peri-intubation **Hypoxia** (<90% SpO_2), **bradycardia** (per age), **hypotension** (SBP <90 mmHg or lowest age-appropriate SBP) or cardiac arrest Peri-intubation period is time from sedative given or last PPV to up to 10 minutes post any invasive airway attempt		
Verbalize post-procedure cleaning & disinfection: After the procedure is complete, separate the display and video adapter from the blade. Dispose of blade per standard protocol and clean/disinfect display and video adapter/I-2 policy.		
***Critical error criteria in addition to starred items:** Check if occurred during an attempt ☐ Failure to ventilate w/in 30 sec if pt apneic or hypoventilating after applying PPE/interrupts ventilations for >30 sec at any time ☐ Failure to provide appropriate FiO_2 preox and during peri-intubation period ☐ Failure to ventilate patient at appropriate rate, volume or pressure: max 2 errors/min permissible ☐ Failure to successfully intubate within 2 attempts without immediately attempting alternate airway ☐ Suctions patient excessively or does not suction the patient when needed ☐ Exhibits unacceptable affect with patient or other personnel ☐ Performs in a way that could cause harm to a pt or is inconsistent with competent care		

Factually document below your rationale for checking any of the above critical criteria.

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_____

Scoring: All steps must be independently performed in correct sequence with appropriate timing and all starred (*) items must be explained/ performed correctly in order for the person to demonstrate competency. Any errors or omissions of these items will require additional practice and a repeat assessment of skill proficiency.

Rating: (Select 1)

☐ **Proficient**: The practitioner can sequence, perform and complete the performance standards independently, with expertise and to high quality without critical error, assistance or instruction.

☐ **Competent:** Satisfactory performance without critical error; minimal coaching needed.

☐ **Practice evolving/not yet competent:** Did not perform in correct sequence, timing, and/or without prompts, reliance on procedure manual, and/or critical error; recommend additional practice

CJM 5/23

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Preceptor (PRINT NAME – signature)

The **Richmond Agitation Sedation Scale (RASS)**

Assesses level of alertness or agitation | Used after placement of ADV airway to avoid over/under-sedation

Combative	+4	Agitated	+2	Alert and calm	0	Light sedation	-2	Deep sedation	-4
Very agitated	+3	Restless	+1	Drowsy	-1	Moderate sedation	-3	Unarousable sedation	-5

Goal: RASS -2 to -3. If higher (not sedated enough) assess for pain, anxiety | Rx appropriately to achieve RASS of -2