GSA-HEMS Emergency Anaesthesia
Currency 3.1 March 2018

Training focus on: **Slow time** **Perfecting details** **Maximising 1st look success.**

COMPETENCY	EXPECTED RESPONSE
SCENE CONSIDERATIONS **Q. What is the ideal place for an RSI? (relevant considerations?)** **Q. What would you take with you on a winch insertion?**	360^0 access to allow maximal simultaneous activity- Considerations: severe weather, crowds etc Packs, O2 – discuss relative merits of winching with Zoll monitor / Medumat 2
ASSESSMENT/MONITORING **Q. Please assess patient as you normally would and set up Zoll X-Series for Emergency Anaesthesia** **Q. How do you record an intubation "event"?** **Q. Troubleshoot failure to pick up sats trace** **Q. Can't read the screen due to glare?**	Establish oxygenation then Doc performs 1^o survey / 2^o survey Paramedic sets up Zoll monitoring – NIBP to 3min, ETCO2 Probe positioning, cover probe from light, change probe (list available probes) Contrast button
PRE-OXYGENATION **Q. Please explain to an airway assistant how to maintain an airway using BLS manoevres, and adjuncts including 2 person BVM procedure.** **Q. Demonstrate Standard Pre-oxygenation** **Q Demonstrate Austere Environment** **Q. How do you use NPs for Preoxygenation and Apnoeic Oxygenation** **Q. Describe how to correct C –spine over-extension in C-Collar**	Demonstrate :Jaw thrust, Guedel sizing and insertion, NP airway insertion, BVM including 2 handed BVM (with 2 alternative hand positions) Discuss CRM around airway team members Role of LMA for pre-oxygenation? 2 handed BVM with PEEP and NPs running at 4L/min with ETCO2 monitoring Tight fitting NRB mask +/- NPs NP connected 10/throughout Sam splint or towel under occiput. Demonstrate neutral neck position using a wall.
EQUIPMENT SETUP **Q. Where to do kit dump for : Road mission/helo missions/ remote from vehicle** **Q. Please perform an Emergency Anaesthetic equipment "kit-dump" prior to checklist run through.** **Q. Who should do laryngoscopy – What factors to be considered?** **Q. What if the on-scene crew are keen to have a go?**	Use of second stretcher / AW139 pt positioning / vehicle use to shade patient, access to suction etc Equipment kit dump – Who does it? Checklist used silently to lay out equipment Predicted difficult airway or poor Sa02 prior to induction or paramedic not current– Doc. Never the on-scene crew – Blame our "protocol"
BRIEFING ASSISTANTS **Q. MILS briefing**	Assistant for MILS positioned on left of patient and briefings accurate and complete.
PACK CONTENT KNOWLEDGE **Q. Where would you find needle for Tx PTX?**	Demonstrates accurate knowledge of contents of pack
INDUCTION DRUGS **Q. Describe induction and post-induction drug choices and doses. What if BP low?** **Q. Calculate the doses and sizing for a 4yr old child (can use cheat sheet)**	Drug doses chosen – appropriate for adult/paed and hypovolaemic patient. Use of Paed Dose sheet accurate
CHECKLIST PROCEDURE **Q. Please run through the challenge response checklist prior to intubation** **Q. Why do we do it and what can go wrong?** **Q. When should we omit it?** **Q. When should we abbreviate it?**	Checklist run through – challenge and response. Need clear role delineation and CHALLENGE and RESPONSE just prior to induction. Discuss common errors: Self checking, Missing items In arrested patients- EMERGENT COLD INTUBATION CHECKLIST - NOT because the patient is too "sick"
BOUGIE AND LARYNGOSCOPE USE **Q. Give the induction drugs and proceed with**	Understanding of 2–person technique with laryngoscopist

laryngoscopy **Q. Demonstrate use of bougie – Adult and paeds** **Q. Stylet use – When might they be used?** **Q. Assess Laryngoscopy grip and arm position**	focusing ONLY on laryngoscopy and assistant handing equipment as needed. DL using CMAC Bougie used naked- appropriate "patter" to assistant Sizing of tubes over bougies Adult – large epiglottis or in Paeds – tube size <5 Laryngoscope held close to blade with elbow tucked in Laryngoscopist keeps eyes on glottis
30 SECOND DRILLS **Q. Describe your immediate actions if unable to obtain an adequate view?** **Including Grade IV, III** **Q. What is ELM and how do we do it best?** **Q. What are the troubleshooting of CMAC turning off?** **Q. Video Recording from CMAC**	**Apply ELM** Change patient position ?small pad under the head Better suction ? Insert laryngoscope deeply and slowly withdraw? Change to VL with CMAC Change laryngoscope blade size or type? Consider changing operator Discuss finer points of ELM – Laryngoscopist themselves holding the thyroid cartilage and moving to improve view. Different from Cricoid or BURP. 20% of time assistant needed to hold position Turn CMAC back-on by fully closing then opening screen How to remember to press and hold button. Discuss whether staff know how to upload video to AirMaestro
BOUGIE USE **Q. If you pass the bougie but can't pass the TT what would be your actions?** **Q. What if the bougie is in, can't pass an 8.0 and the sats are falling?**	Appropriate use of bougie – esp holding tip Change to smaller pre-prepared tube (Don't pull out and bag patient reflexively if bougie is in trachea)
POST INTUBATION CHECKS **Q. Demonstrate how to secure a tube in a paed patient.** **Q. Any other considerations in paed patients** **Q. Post intubation patient Sa02 falls. Management?**	Taping technique- Pros and Cons of taping vs tying in adult vs paeds OG tube esp if BVM ventilation, ventilation settings, tube migration, kinking of tube, cuff pressure etc Troubleshoots desaturation- Patient, Circuit, 02 / DOPE etc
FAILED INTUBATION DRILLS **Q. If you are unable to intubate describe your next steps in order** **Q. If still unable to ventilate?** **Q. What other uses of an LMA ?** **Q. Failure to ventilate with LMA?** **Q. When might a surgical airway be considered as a primary procedure?** **Q.When to do needle cricothyroidotomy?**	Ventilate – 2 person BVM with adjuncts and neutral position if needed LMA insertion technique Pre-oxygenation, Trapped patients etc Describe Surgical Airway procedure Severely entrapped patient, limited mouth opening (eg burns) Paeds (?<8yrs old)
SURGICAL AIRWAY **Q. Demonstrate Scalpel/Finger/Bougie/Tube technique**	Discuss indications – Primary or following failed oxygenation Technique including neck positioning, anatomy and 2 types of incisions using mannequin
Post Intubation **What is the predeparture checklist ?** **How do you set up the Medumat II?**	What is the pre-departure checklist ? What are the adv of mech vent post intubation? Set up the Medumat II Ventilator for typical ventilation – TV 500 RR 12 PEEP 5.