

Emergency Department Procedural Sedation - November 3, 2020 1300

Spectrum Health Contact (Dr. Trevor Cummings and Mellissa Taylor) *Highlight denotes new content

Document reviewed: November 3, 2020

Introduction

Evidence shows that as the prevalence of COVID-19 increases exponentially, patients presenting with seemingly non-related medical problems may expose health care providers to increased risk of contracting the disease if not properly protected. Individuals may maintain high viral loads in the upper respiratory tract with significant potential for viral shedding and transmission even if asymptomatic.^{68,69} While primarily transmitted by droplets, airborne transmission is possible through aerosolization in the setting of high flow oxygen, bronchoscopy, open tracheal suctioning, intubation, extubation, non-invasive positive pressure ventilation, endoscopy, or transesophageal echocardiography.⁷⁰ Additional safety considerations are required for patients who receive urgent or emergent Procedural Sedations.

Staffing

1. Patient contact personnel to manage Procedural Sedation should be kept to a minimum to reduce staff exposure. While well intended, others not directly essential to the procedure should not be within 6 feet of the patient to protect themselves and non-essential ancillary staff within the room should be avoided. To minimize unnecessary exposures, personnel recommendations include:
 - a. **In-room personnel:** FULL airborne Personal Protective Equipment (PPE) required at all times – see protection described below.
 - i. 1 Attending Physician (Sedationist- to administer sedation meds)
 - ii. 1 Registered Nurse (sedation assessments, charting, line and meds as needed)
 - iii. 1 Nursing Tech or Assisting Provider(s) (assisting Proceduralists)
 - iv. 1 Respiratory Therapist (respiratory monitoring/management (optional per sedation policy if using ketamine))
 - v. 1 Proceduralist (Provider performing other procedure)
 - b. **Optional outside room** personnel – outside of room at doorway
 - i. 1 Registered Nurse (charting/medications)

Protection

1. All personnel in room must wear **at minimum:** N95 mask, gown, gloves and eye protection.
2. **If intubation is being performed, the individual at the head of bed position should consider use of an PAPR/CAPR or N95 combined with an appropriate face shield.**
3. **Outside room:** Standard ED PPE

Equipment

1. Attempt to limit exposure of supplies and equipment as best as possible.
 - a. Code carts should stay outside resuscitation bay/room. If defibrillation is needed, the defibrillator should be brought into the room for cardioversion. Other items can be passed from cart to bedside to decrease the risk of contaminating the code carts clean from COVID.
2. After sedation, all equipment that was used must be cleaned carefully, including monitor leads, monitor, defibrillator, suction etc. Staff should do a 5 minute “time out” to carefully identify any and all equipment used, much like “sponge count” in operating rooms.

3. Take measures to avoid the necessity of rescue ventilation and Bag Valve Mask (BVM), but if necessary, a viral filter and PEEP valve are used. If respiratory decompensation occurs, consider intubation for management. Endotracheal intubation is preferred over supraglottic or laryngeal mask airway.
4. When possible, hold compressions or other thoracic repositioning/movement for intubation or any other oral access to decrease the aerosolization risk.
5. Ketamine can result in a decreased need for airway manipulation and/or positive pressure ventilation with BVM. Consider widening clinical use.
 - a. Pre-treatment with benzodiazepines may be helpful for adult sedations (prophylactic midazolam 0.03 mg/kg IV).
 - b. Consider glycopyrrolate administered 30 minutes prior if performing urgent (non-emergent) sedation if patient has impaired secretion clearance.
 - c. In cases of a clear respiratory infection, ketamine carries a potential increase in laryngospasm.

References: [COVID 19 Literature Bibliography.docx](#)