Near Death Asthma: Forced to Act/Crash Airway PPE · Scene Safety Scene • Mechanism of injury or illness Assessment Number of patients • Need for additional resources • Consider C-Spine precautions Altered: Indicator for LOC near death asthma • RR • SPO2 Delegate • ETCO2 basic vitals • BP • HR/ 5 lead Suction airway Head tilt Airway • OPA/NPA • Elevated to 30 • BVM • Try 2 person BVM **Breathing** • Hi flow nasal cannula • Switch back to one person instruct to rate of 10 Consider · Upper airway Severe possible Mask Seal Still inadequate? obsctruction bronchospasm causes Severe bronchospasm identified Call for assistance Confirm history of asthma Manual pressure on chest Ventolin · Quick contraindications Atrovent • Adult: 100mcg x 30 MDI • Adult: 20mcg x 15 q 30 mcg MDI Bronchodilators Recruit assistance to Contra: Hypersensitivity, • Contra: Hypersensitvity adminsiter **Tachydysrhythmias** Epi (1mg/ml) IM Epi Quick contraindications • Adult: 0.3mg IM q 20 x 3 • Set timer for 20 mins • Contra: None Start IV Open Fluid • 500cc • Set timer for 5 mins Blus Contiuned Reassess wheezes or lung sounds silent · Likely unsuccessful Consider in NDA due to high extraglottic airway pressure • Current or rapidly impending airway obstruction or failure of oxygenation Recognize (Inadequate MV, SPO2 <85% with ALOC) FORCED TO despite interventions ACT/ Crash • ** Key for near death asthma is current or **AIRWAY** impending respiratory failure (Cahill, 2024) Confirm intubation is not delaying approprirate treatments Optimize • Connect continuous waveform capnography to BVM oxygenation/ • Apply nasal cannula at 15 LPM for apneic oxygenation ventilation Can you proceed without sedation/paralysis? Yes No • Recognize in near death asmtha ketamine is a bronchodilator and FORCED TO **CRASH** should be used in induction when **AIRWAY** ACT possible (Cahill, 2024) Succinocholine Ketamine Hypersensitivity Confirm no Hypersensitivity • Known of suspected Hyper K (acute or chronic renal **AND** contraindications • Relative: Conditions where a significant failure, glomerular nephritis, lupus nephritis) to airway elevation of BP is hazardous (uncontrolled HTN, • Familiy Hx of malignant hyperthermia or plasma medications aneurysm, acute heart failure, angina, recent MI) pseuchocholinesterase deficiency Myopthathies associated with elevated CK Administer Ketamine induction • Adult: 1.5mg/kg IV over 1-2 min agent Succinylcholine Administer Adult: 1.5mg/kg paralytic max 150mg V • Minimum kit required for one attempt Suction • Stethoscope • Consider Tube Prep • Laryngoscope/ Blade prepping push equipment • Bougie/ Stylet pressor here • Syringe • Tube holder • Eyes on surgical airway Wait for fasiculations and apnea Suction then Surgical Unsuccessful intubate airway • Confirm depth Post • Inflate cuff advanced • Confirm placement • Assign parameters airway management • Secure • Elevate head Reassess vitals Prepare to • Consider Epinephrine Push address post intrathoracic Adult: 100mcg in 10cc flush (10mcg/ml) intubation pressure (slow vent • 10mcg over one min (max 50mcg) rate or < PEEP) hypotension Ketamine Prepare to • Adult: 1mg/kg (50mg/ml) address • Contra: Hypersensitivity, Relative: Conditions where a significant post-intubation elevation of BP is hazardous (uncontrolled HTN, aneurysm, acute sedation heart failure, angina, recent MI) DOPES: Prepare to • D: Dislodgement (Esophageal = EDD & CO2, Maintstem = auscultation & depth at teeth) address O: Obstruction (Poor compliance or secretions = saline and deep suction, poor sedation and bite block = increase sedation) issues with • P: Pneumothorax (Hypotension, JVD & decreased breath sounds = needle decompression assured not R or L mainstem) **DOPES** • E: Equipment failure: O2 resevoir bag full, BVM able to make positive pressure with no leaks, ETT tube inflated • S: Stacking (Auto Peep = slow ventilations) Magnesium Sulfate • Adult: 2g in 100cc over Administer 10 mins (100gtts) Mag Sulfate Contra: Heart Block, Renal Failure Epi Infusion Utilize when MDI Call OLMC • 4mg in 250 (conc 16mcg/ml) bronchodilators are for Epi • 0.1mcg/kg/min still unable to enter Infusion • Contra: None lungs (Cahill, 2024) Ventolin Continue Atrovent Adult: 100mcg x 30 MDI treatment • Adult: 20mcg x 15 q 30 mcg MDI • 500cc bolus Contra: Hypersensitivity, plan Contra: Hypersensitvity • 250cc drip Tachydysrhythmias Reassess epINEPHrine Breathing Improved? 30 33.8 37.5 41.3 45 48.8 52.5 56.3 60 63.8 67.5 75 82.5 93. 37.5 42.2 46.9 51.6 56 60.9 65.6 70.3 75 79.7 84.4 93.8 103.1 112.1
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150 168.8 187.5 206.3 225 243.8 262.5 281.3 300 Quick Rapid (AHS protocols, 2024) Medical Hx Transport Complete Continue outstanding aggressive vitals References Tx 1) AHS protocols. (2024, August 8). https://www.ahsems.com/public/protocols/templates/desktop/#home 2) Cahill, Katherine N. (2024, November 5). Acute exacerbations of asthma in adults: Emergency department and inpatient management UpToDate. https://www.uptodate.com/contents/acute-exacerbations-of-asthma-in-adults-emergency-department-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-management-and-inpatient-and-inpatient-management-and-inpatient-and-inp 3) MacLeod, M. H. (2024b). Forced to Act - Checklist. Consider Consider differentials differentials Further stabilize and transport