

Objectives

- Outline the anatomic and physiologic features of the pediatric airway that impact approaches to address acute respiratory failure in pediatric patients
- Discuss the role, benefits, and selection of noninvasive ventilatory support modes for use in pediatric respiratory airway management
- Identify the decision-making and application processes related to intubation and definitive airway management across the broad range of pediatric patients
- Review background data and clinical relevance of cervical spine injuries, blunt cerebrovascular injuries, and penetrating palate injuries in the pediatric population and compare the approaches to assessment, diagnosis, and treatment options for each form of injury
- Summarize the critical points of assessment for children who have undergone surgical intervention resulting in a single-ventricle physiology heart and describe the alterations in common algorithms, procedures, and drugs recommended for addressing common disorders requiring emergency care
- Describe alterations in assessment, problem identification, and stabilization that are required for the child with a ventricular assist device (VAD) in the emergency medicine setting

Common & Not So Common Pediatric Transport Encounters

Content Outline

1. The Management of Threatened or Compromised Airways in Pediatric Patients
 - 1.1 Differences in anatomy and physiology of the pediatric airway
 - 1.2 Approach to acute pediatric airway failure
 - 1.3 Use of noninvasive ventilatory support (NIV) including factors for selection
 - 1.4 Pediatric intubation process from decision to placement across populations
 - 1.4.1 Tube type and size
 - 1.4.2 Equipment, supplies and drugs to support successful attempts
 - 1.4.3 Initial ventilatory management strategies
2. Neck Trauma in the Pediatric Population
 - 2.2 Evaluation, clinical relevance, and therapeutic options for
 - 2.2.1 Cervical spine injuries
 - 2.2.2 Blunt cerebrovascular injuries and the seatbelt sign
 - 2.2.3 Penetrating palate injuries
3. Cardiac Emergencies in Children with Surgical Palliation of Cardiac Disease
 - 3.1 Description of staged single-ventricle surgeries and basic physiology of the single ventricle heart
 - 3.2 Necessary modifications to pediatric emergency algorithms, commonly used drugs, and resuscitation/stabilization approaches
 - 3.3 Managing the child with a ventricular assist device in emergency settings

Reading Material Resources

Module WB2455: Common & Not So Common Pediatric

Transport Encounters is based on the resources on page two. A copy of each resource is included with the module.

Reading Material Resources

Just Breathe-Tips and Highlights for Managing Pediatric Respiratory Distress and Failure, Cobb MJ, *Emergency Medical Clinics of North America*, 39 (2021), 493-508

Neck Trauma-Cervical Spine, Seatbelt Sign, and Penetrating Palate Injuries, Collum NM and Guse S, *Emergency Medical Clinics of North America*, 39 (2021), 573-588

Cardiac Emergencies in Kids, Strobel AM and Alblaihed L, *Emergency Medical Clinics of North America*, 39 (2021), 605-625