

**COMMON CLINICAL DIAGNOSES AND CONDITIONS****APPARENT LIFE-THREATENING EVENT****INTRODUCTION**

Apparent Life-Threatening Event (ALTE) is defined by the NIH Consensus Development Conference on Infantile Apnea and Home Monitoring as an episode that is frightening to the observer and that is characterized by some combination of apnea (central or occasionally obstructive), color change (usually cyanotic or pallid but occasionally erythematous or plethoric), marked change in muscle tone (usually marked limpness), choking, or gagging. Because ALTE is a description of symptoms rather than a diagnosis, epidemiologic data is imprecise. It is estimated that 1-3% of infants will have an episode that can be described as an ALTE and that most of these infants present before 2 months of life. Pediatric hospitalists can provide a valuable service to the family/caregiver by reconciling the potentially life threatening nature of ALTE with an infant who often appears normal on physical examination. Pediatric hospitalists should approach the broad differential diagnosis in a logical, systematic manner.

**KNOWLEDGE**

*Pediatric hospitalists should be able to:*

- Describe the differential diagnosis of ALTE (such as gastroesophageal reflux disease, seizure, apnea of prematurity, infection [sepsis, meningitis, pertussis, bronchiolitis], toxin, breath-holding spell, cardiac arrhythmia, obstructive sleep apnea, inborn errors of metabolism, central hypoventilation syndrome, hydrocephalus, child abuse, Munchausen's Syndrome by Proxy, and others) and the key historical or physical findings specifically associated with each diagnosis.
- Provide indications for admission to the hospital and determine the appropriate level of care required.
- Describe the goals of hospitalization including stabilization, diagnosis, treatment, reassurance, and education.
- Compare and contrast Sudden Infant Death Syndrome (SIDS) versus ALTE.
- Discuss current hypotheses regarding the etiology of SIDS and relate this to the spectrum of disorders that may cause ALTE.
- Describe a basic approach toward the work-up for ALTE and list the factors that may warrant an increased level of laboratory, radiographic, or other testing.
- Summarize the literature on the impact of home monitors on morbidity and mortality and identify the benefits and limitations of home monitoring.

**SKILLS**

*Pediatric hospitalists should be able to:*

- Resuscitate and stabilize an infant with ALTE who presents in an unstable state.
- Obtain an accurate patient history and perform a thorough physical examination eliciting features to narrow the differential diagnosis of ALTE.
- Critically assess the level of evidence and risk/benefit ratio for the diagnostic work-up and management plan.
- Interpret basic tests (such as laboratory tests, chest x-rays, and electrocardiograms) and identify abnormal findings that require further testing or consultation.
- Order appropriate monitoring and correctly interpret monitor data.
- Engage consultants and support staff (such as subspecialty physicians and social workers) efficiently and appropriately.
- Use the ALTE admission as an opportunity to educate the family/caregiver on proper sleep positioning and risk factors for SIDS.
- Impart basic resuscitation skills to the family/caregiver, using a teach-back method.
- Coordinate care with the primary care provider and arrange an appropriate transition plan for hospital discharge.

**ATTITUDES**

*Pediatric hospitalists should be able to:*

- Communicate effectively with the family/caregiver, and healthcare providers regarding findings and care plans.
- Ensure a safe and supportive atmosphere for the patient and family during the period of observation and evaluation of a child admitted following an ALTE.
- Counsel the family/caregiver on the valid use of home monitors in a limited population, noting the features which support or refute use of a home monitor for their child.
- Realize the impact of an ALTE on the family/caregiver and the implications for discharge planning and follow-up.

## COMMON CLINICAL DIAGNOSES AND CONDITIONS

- Role model professional behavior when addressing issues related to potential social concerns and child abuse evaluation.

## SYSTEMS ORGANIZATION AND IMPROVEMENT

*In order to improve efficiency and quality within their organizations, pediatric hospitalists should:*

- Lead, coordinate or participate in multidisciplinary initiatives to develop and implement evidence-based clinical guidelines to improve quality of care for infants with ALTE.
- Advocate for preventive education regarding sudden infant death syndrome in the hospital system and community.

Not for Distribution