

In the event that an underlying diagnosis (such as, those mentioned previously) is not established, home monitoring may be recommended. The most commonly used monitoring is continuous recording of cardiorespiratory patterns (cardiopneumogram or pneumocardiogram). Four-channel pneumocardiograms (or multichannel pneumogram) monitor heart rate, respirations (chest impedance), nasal airflow, and oxygen saturation. A more sophisticated test, polysomnography (sleep study), also records brain waves, eye and body movements, esophageal manometry, and end-tidal carbon dioxide measurements. However, none of these tests can predict risk. Some children with normal results may still have subsequent apneic episodes.

Therapeutic Management

The treatment of an infant with an ALTE depends on the underlying condition (see earlier). Treatment of recurrent apnea (without an underlying organic problem) usually involves continuous home monitoring of cardiorespiratory rhythms and in some cases the use of methylxanthines (respiratory stimulant drugs, such as caffeine). The decision to discontinue the monitoring is based on the infant's clinical condition. A general guideline for discontinuation is when infants with ALTEs have gone 2 or 3 months without significant numbers of episodes requiring intervention.

Newer home apnea monitors allow download of information that assists the practitioner in deciding when to discontinue home monitoring. It is imperative to remember, however, that the home apnea monitor will not predict or prevent SIDS deaths ([Strehle, Gray, Gopisetti, et al, 2012](#)). Furthermore, impedance-based monitors detect chest wall movement and will not detect obstructive apnea unless the episode involves significant bradycardia.

Nursing Care Management

The diagnosis of an ALTE causes great anxiety and concern in parents, and the institution of home monitoring presents additional physical and emotional burdens. Parents of infants on home apnea monitors report experiencing emotional distress, especially