

Car Seat Challenge: Suggested Protocol

Purpose

As part of the discharge process, and in accordance with American Academy of Pediatrics guidelines, each preterm infant born less than 37 weeks gestational age should have a period of observation in a car safety seat before hospital discharge to monitor for possible apnea, bradycardia or oxygen desaturation.

Equipment

- Heart and respiration monitor with pulse oximetry (flow channel optional)
- Federally approved infant car seat (with base if applicable)
- Car Seat Challenge Log Sheet

Guidelines

1. A medical order is required to perform the test.
2. All infants who meet *one of the following* criteria at time of discharge will undergo a Car Seat Challenge:
 - Gestational age less than 37 weeks
 - Infants requiring oxygen supplementation
 - Infants being sent home on an apnea monitor
 - Other medical conditions which place the infant at high risk for apnea, bradycardia or oxygen desaturation
3. Testing will be completed by trained clinical staff within seven days of discharge.
4. The Car Seat Challenge Log Sheet will be used to record patient data. Data will be collected and recorded by trained clinical staff.
5. Parents and/or clinical staff will position the infant properly in the approved infant car seat. Staff should offer parent training on proper positioning before infant goes home.
6. Infant should be reclined at a 45-degree angle in the car seat. Harness clip should be positioned at chest level.
7. The infant will undergo heart, respiration and oxygen saturation monitoring. Monitoring for obstructive apnea is highly recommended as well.
8. Monitor and record the infant's heart rate, respiratory rate, flow (optional) and oxygen saturation when first positioned in car seat and every 15 minutes thereafter for a length of time 20 minutes greater than or equal to the journey home and no less than 60 minutes.
9. Assess and record color, respiratory effort and activity level when first positioned in the car seat and during the periodic iterations for the duration of the test.
10. The Car Seat Challenge will be discontinued/assessed as FAILED if any of the following occurs:
 - Bradycardia after repositioning
 - Apnea for greater than 20 seconds
 - Persistent labored respirations despite repositioning
 - Dusky colored skin as a result of low oxygenation
 - Low oximetry reading (85% or less) (typically for 20 seconds or more)
11. The clinical staff will indicate whether the infant has passed or failed the Car Seat Challenge and sign the log sheet in the designated area. All failures must be reported to the infant's primary care provider (physician or NNP).
12. When failure occurs, a physician or NNP signature on the log sheet is required and the team will consult with parents about the next step.
13. The signed, completed Car Seat Challenge Log Sheet will be placed in the infant's chart.

IMPORTANT: These guidelines are a compilation of several hospital protocols based on current field practices. This document is intended to serve as reference only and not meant to supersede established medical protocols or serve as a standard of care. Following these guidelines will not ensure safe transport.



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