longer period of time compared to the simultaneous group.

Positioning

- Vertical versus lying down
- Supine positioning is associated with increased fear in children who experience a greater feeling of lost control, confusion, anxiety, and anger (Gaskell, Binns, and Heyhoe, 2005).
- One hundred eighteen 9-month-old to 4-year-old children were randomized to either upright or supine positioning for IV insertion in a trial conducted by Sparks, Setlik, and Luhman (2007). The upright group had lower PBRS-R (procedural behavior rating scale-revised) scores, indicating less anxiety, fear, and pain compared to the supine group.
- In a trial of 106 2- to 6-month-old infants, there was no difference in pain score or duration of cry between infants placed supine and upright (Ipp, Taddio, Goldbach, et al, 2004). However, parents of the supine group could pick up their infant at any time during the procedure. Results from the study were not adjusted for changes in cry that occurred after the infant was picked up. Results from this study suggest that contact between the infant and parent (e.g., soothing the infant) provides analgesic effects for the infant and may have masked the