

a full 60 seconds to detect irregularities in rate or rhythm. The heart rate is taken apically with a stethoscope, and the femoral arteries are palpated for equality of strength or fullness.

Measurement of BP provides baseline data and may indicate cardiovascular problems. BP is most easily and accurately assessed using oscillometry (Dinamap) when the newborn is in a quiet or sleep state using an appropriate cuff width-to-arm ratio of 0.45 to 0.70 (approximately half to three quarters) (Fig. 7-5). For healthy term infants, the average oscillometric systolic/diastolic BP is 65/45 mm Hg on day 1 of life, changing to 69.5/44.5 mm Hg by day 3 (Kent, Kecskes, Shadbolt, et al, 2007). Compare BP in the upper and lower extremities, which should be equal.

Nursing Alert

Although uncommon, the presence of neonatal hypertension may be a sign of a significant underlying problem (such as renal, cardiac, or thromboembolic pathologic condition), or it may be associated with a medication treatment regimen. Neonatal hypertension is brought to the primary practitioner's attention for further evaluation.



FIG 7-5 Measurement of blood pressure using oscillometry.

The American Academy of Pediatrics, Section on Cardiology and Cardiac Surgery Executive Committee recommends routine pulse