

Figure 1. Surface and deep landmarks for right internal jugular (RIJ) and subclavian venipuncture. Puncture sites: 1 = high approach to RIJ used in this study—midway between mastoid process and sternal notch. 2,3 = middle approach using apex of muscular triangle formed by the sternal and clavicular heads of the sternocleidomastoid muscle, or lateral to the cricoid cartilage. 4 = low approach using the jugular notch as a landmark. 5 = subclavian vein puncture site used in this study—1 cm lateral to midpoint of clavicle for patient weighing ≤ 10 kg, 2 cm lateral if >10 kg. SVC/RA = super-

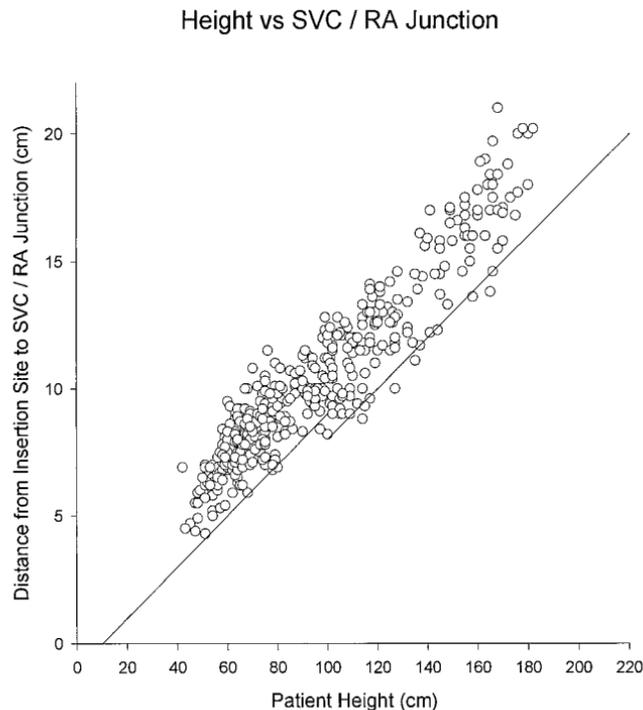


Figure 2. Plot of patient height versus distance from catheter insertion site to junction of superior vena cava (SVC) and right atrium (RA) for right internal jugular and right subclavian vein catheters. Solid lines represent recommendations for initial length of catheter insertion in centimeters: $(\text{patient height in cm}/10) - 1$ for patients ≤ 100 cm, and $(\text{patient height in cm}/10) - 2$ for patients >100 cm.