EXAMPLE 9 — Northwestern University Transition from IV to SC Insulin Protocol

DeSantis AJ, Schmeltz LR, Schmidt K, et al. *Endocr Pract.* 2006;12:491–505.

Table 1
Calculation of Subcutaneous Insulin Need

Example 1. Conversion From Intravenous Insulin Therapy

Step 1. Intravenous insulin drip rate averaged 1.8 U/h with final glucose level 98 mg/dL

Step 2. Calculate average insulin infusion rate for last 6 h = 2.1 U/h and multiply × 24 to get total daily insulin requirement (2.1 × 24 = 50 U/24 h)

Step 3. Multiply this 24-h dose (50 U) × 80% to obtain glargine dose = 40 U, which is given and the infusion is stopped

Step 4. Multiply the glargine dose by 10% to give as a rapid-acting insulin (e.g., aspart, lispro, or glulisine) at the time the glargine is given and the infusion is stopped

Step 5. Give 10% of the glargine dose as prandial doses before each meal

Example 2. Estimating Insulin Doses When No Intravenous Insulin Therapy Has Been Given

Step 1. Calculate estimated total daily dose of insulin as follows:
Type 2 diabetes (known): 0.5 to 0.7 U/kg
Type 1 diabetes (known): 0.3 to 0.5 U/kg
Unknown: 0.3 to 0.5 U/kg

Step 2. Divide total daily dose of insulin into 50% basal as glargine and 50% prandial as aspart, lispro, or glulisine

Step 3. Divide prandial insulin into 3 equal doses to be given with meals