Infusion Sets and Infusion Site Management
Objective

Demonstrate technical and practical aspects of insulin delivery using an insulin pump

Key Points

• Several options of infusion sets and reservoirs available to meet individual patient needs

• Changing an infusion set is a simple, stepwise process

• Proper infusion site management is key to successful insulin pump therapy
An Infusion Set is the Link Between the Insulin Pump and the Patient’s Body
Insulin Infusion
Types of Infusion Sets:

- Quick-set®
- Silhouette®
- Sure-T®
# Infusion Set Reference Guide

<table>
<thead>
<tr>
<th>Description</th>
<th>Quick-set®</th>
<th>Silhouette®</th>
<th>Sure-T®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector Type</td>
<td>Paradigm®; Luer-lock</td>
<td>Paradigm (13 mm, 17 mm); Luer-lock (17 mm)</td>
<td>Paradigm</td>
</tr>
<tr>
<td>Cannula/Needle Type</td>
<td>Soft Cannula</td>
<td>Soft Cannula</td>
<td>Steel Needle</td>
</tr>
<tr>
<td>Cannula/Needle Angle</td>
<td>90°</td>
<td>Variable (35°-45°)</td>
<td>90°</td>
</tr>
<tr>
<td>Cannula/Needle Length</td>
<td>6 mm; 9 mm</td>
<td>13 mm; 17 mm</td>
<td>6 mm</td>
</tr>
<tr>
<td>Tubing Length</td>
<td>23 inches; 43 inches</td>
<td>23 inches; 43 inches</td>
<td>23 inches</td>
</tr>
<tr>
<td>Automatic Insertion Device</td>
<td>Quick-serter®</td>
<td>Sil-serter®</td>
<td>None</td>
</tr>
<tr>
<td>At Site Disconnect</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Change Frequency</td>
<td>3 days</td>
<td>3 days</td>
<td>2 days</td>
</tr>
</tbody>
</table>
Changing an Infusion Set is a Simple Process

Stepwise process:
1. Fill the reservoir with insulin
2. Attach the reservoir to the infusion set
3. Rewind the insulin pump
4. Insert the reservoir into the insulin pump
5. Manually prime the infusion set
6. Insert the infusion set
7. Fix prime the infusion set (Only for Silhouette Infusion Sets and Quick-Set Infusion Sets)

Advise your patients to:
1. Always wash hands
2. Always use a new infusion set AND a new insertion site every 2-3 days
3. Clean the insertion site with an antiseptic or skin preparation solution.
Filling the Reservoir
Manual Prime

Manual prime fills the infusion set tubing with insulin before attaching it to the infusion site

Stepwise process:
1. Hit ACT Button for Main Menu
2. Go to Prime, Hit ACT Button
3. Go to Rewind, Hit ACT Button
4. Lock reservoir into insulin pump
5. Press and hold ACT to start the prime
6. Continue to hold the ACT until insulin droplets form on the tip of the infusion set introducer needle
7. Check for air bubbles in tubing

Advise your patients to:
1. Always manually prime the infusion set before inserting it
2. Always make sure infusion set is disconnected from the body
Choosing a Site

• Selecting the best infusion site
  – Recommended sites
    • Abdomen
    • Hips and buttocks
  – Other possible infusion sites:
    • Outer thigh
    • Back of the arms

• Rotate The Site Regularly to Avoid:
  – Risk of infection/irritation
  – Unpredictable insulin absorption
  – Fatty tissue build up (hypertrophy)
  – Scar formation
Regular Site Rotation is Critical

- For maximum effectiveness, consider using both rotation methods and alternating between them

- New site should be one inch away from previous site
- Avoid the two-inch area surrounding the belly button
Fixed Prime

Fixed prime fills the soft cannula with insulin and is required after your infusion set is inserted into your body and the introducer needle is removed.

Stepwise process:
1. Go to PRIME MENU
2. Select Fixed Prime and press ACT
3. In the FIXED PRIME screen, enter the amount for your type of infusion set, then press ACT
4. A beep will sound when priming is complete

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<th>Sure-T®</th>
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<tbody>
<tr>
<td>0.3 mL (6mm)</td>
<td>0.7 mL</td>
<td>None</td>
</tr>
<tr>
<td>0.5 mL (9mm)</td>
<td>(13mm and 17mm)</td>
<td></td>
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</tbody>
</table>
Change the Infusion Set and Reservoir Every 2 to 3 Days

• The U.S. Centers for Disease Control and Prevention (CDC) recommend changing the infusion set every 2 to 3 days to help prevent:
  – Infection\(^1\)
  – Scarring\(^2\)
  – Fatty tissue buildup (hypertrophy)\(^3\)

Additional Resources

• 24 Hour HelpLine toll-free at 1-800-646-4633

• Visit our website at
  www.medtronicdiabetes.com/infusionsets

• Contact the Medtronic Diabetes Sales Representative