

Hyperglycemia with Insulin Pump

Have you ever had high glucose levels that won't come down even after giving more insulin? It was probably due to an infusion site failure.

An infusion site failure is where insulin does not flow through the infusion site cannula into the body well enough. This could be caused by a bent cannula or it could be that the location you are wearing the infusion site isn't absorbing insulin very well and needs to be replaced.

Because insulin pumps do not use long acting insulin, ketones can form quickly when infusion sites fail. Follow these instructions below to help troubleshoot infusion site failure and prevent a trip to the hospital.

Glucose > 300 mg/dL for 2-3 hours and not sure why?

Check ketones *BEFORE* giving correction dose.

<p><0.6 = no ketones</p>	<ol style="list-style-type: none"> 1. Change infusion set 2. Give correction bolus through NEW infusion set 3. Recheck glucose in 2 hours <p>Vomiting or illness? Refer to sick-day action plan.</p>
<p>0.6 to 1.5 = trace to moderate ketones</p>	<ol style="list-style-type: none"> 1. Give syringe injection of insulin (not through pump) 2. Change infusion set 3. Turn off any automated insulin for 4-6 hours 4. Recheck glucose and Ketones every 2 hours until Ketones <0.6 and glucose <300 mg/dl 5. Give correction insulin every 2 hours after injection, as needed
<p>>1.5 = large to extra-large ketones</p>	<ol style="list-style-type: none"> 1. Give syringe injection of insulin (not through pump) 2. Follow all steps for "Ketones 0.6 to 1.5" (above) AND 3. CALL diabetes provider or urgent care if Ketones persist or increase