

If you have Type 1 Diabetes, you **must not** stop your basal insulin or you will go into diabetic ketoacidosis

1. General guidelines

- If you are having surgery, make sure your infusion site is in a location away from where the surgery will occur.
- If you wear a Continuous Glucose Monitor, the sensor must be removed for all CT scans, MRIs and X-rays. Please remind your team that it is not disposable and must be saved.
- Your insulin pump must be removed for all CT scans, MRIs and X-rays.
- If your pump needs to be removed during procedure (all procedures longer 2 hours):
 - Remove your pump immediately before the procedure and put it in a safe place close to or within the procedure room. Reconnect your pump as soon as your procedure is complete.
- If your pump can stay on during procedure (most procedures less than 2 hours):
 - The anesthesiologist will use the pump as needed during the procedure.

Summary: Remind your care team you are wearing a pump or continuous glucose monitor. Discuss pump use during the procedure with the team and review what will happen and where your pump will be stored if the pump needs to be removed.

2. What do I need to do the day before the procedure?

• Change your infusion set, tubing and insulin in your pump the day before

your procedure. Do this at least 4 hours before you go to bed the night before the procedure.

- Test your blood sugar at dinner and bedtime the night before the procedure and first thing in the morning of the procedure. Continue to check your blood sugars every 1-2 hours up to your procedure. Also check your blood sugars whenever you feel that you might be experiencing low blood sugar or very high blood sugar.
- If you have Type 1 diabetes, check your urine for ketones when your blood sugars are greater 250mg/dL. If you have moderate or large ketones, contact your health care provider to manage this condition.

3. How will I set my pump the night before the procedure?

- Continue basal rate unless you have frequent hypoglycemic episodes, then use a temporary basal rate of 70%.
- Give your insulin for high blood sugar and for food as you normally would.

4. How will I set my pump the morning of the procedure?

(If I am **not allowed** to eat or drink the day of my procedure)

- Set a temporary basal of 70%.
- If your blood sugar is high (more than 250mg/dL), give half of your correction dose.

5. What are the instructions if I have a low blood sugar?

• You **must** treat all low blood sugars. If your blood sugar is less than 70mg/dL, drink ½ cup of clear sugar-sweetened beverage such as apple juice, Sprite or 7UP (all liquids **must** be clear). Recheck your blood sugar in 15 minutes. If your blood sugar is still less than 70mg/dL, drink another ½ cup of clear sugar-sweetened beverage and reduce basal pump rate to 40%.

Department of Internal Medicine Preparing for a Medical Procedure: Guidelines for Adults on Insulin Pumps **Note:** If you need to treat a low blood sugar within 2hrs before to your procedure, call to inform your procedure team. Your procedure may need to be rescheduled.

- If your blood sugar is extremely low (less than 40mg/dL), your family or friends should help you by using glucagon and calling 911 if needed. Make sure that you also call ______ to notify the procedure team.
- 6. What are the instructions if I need to do a bowel prep and follow a liquid diet?
 - Continue your normal basal rates until the night before your procedure.
 - See **section 3** above for instructions on what to do the night before your procedure.
 - When drinking sugared beverages and/or the bowel prep, you may need less bolus insulin to cover the carbs you are drinking. This is because sugary liquids will leave your system more quickly than solid foods and you will be drinking these liquids slowly throughout the day. Start by giving **half of your usual bolus dose** for the liquids you are drinking that have carbs.

7. What supplies do I need to bring to the hospital/clinic?

- □ Testing supplies (glucometer, test strips, lancing device.)
- \Box 2 extra infusion sets:
 - tubing, cartridges/reservoirs and tape
- \Box 1 extra sensor and insertion device for your continuous glucose monitor.
- \Box 1 extra battery or charging cord for your pump.
- □ Fast acting carbohydrate to treat any hypoglycemia when traveling to and from the procedure.

Department of Internal Medicine Preparing for a Medical Procedure: Guidelines for Adults on Insulin Pumps Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Author: Glycemic Management P & T Subcommittee

Patient Education by <u>Michigan Medicine</u> is licensed under a <u>Creative Commons Attribution</u> <u>NonCommercial-ShareAlike 4.0 International Public License</u>. Last Revised 11/2020