Insulin Pumps

An insulin pump provides a continuous flow of insulin into your body as well as giving doses of insulin with meals. The pump is small battery-operated device smaller than a deck of cards. It contains a reservoir (*cartridge*) of insulin which you refill regularly. A small plastic tube connects the pump to a needle (although some pumps are self-contained), and the needle is placed into the skin of your abdomen, buttocks or thighs. The insulin pump can be used by people who have type 1 diabetes and those that have type 2 diabetes requiring insulin.

INSULIN PUMP ADVANTAGES

These may vary depending on the type of diabetes you have.

- Needle insertion every 2-3 days instead of several injections each day.
- More control over your diabetes since you are the one making decisions about insulin dosages.
- The risk of low blood glucose (*hypoglycemia*) is less.
- You may be able to better manage "dawn phenomenon" (rise in early morning blood sugar).
- You may experience an improvement in lifestyle flexibility.

INSULIN PUMP DISADVANTAGES

- The cost of the pump and supplies may be higher than syringes and related supplies.
- The infusion site can get irritated or infected.
- The pump can fail, or the tubing can get blocked.
- Requires checking blood glucose more often, not less.

RISKS & COMPLICATIONS OF AN INSULIN PUMP

- The infusion site can get irritated or infected.
- Ketoacidosis (DKA) can occur if the pump stops delivering insulin. This can be due to malfunction, running out of insulin, blockage of tubing, accidental dislodgement of the insulin needle delivery site. Ketoacidosis is a life threatening condition resulting from lack of insulin. Most devices have alarms to warn you of malfunction.
- Hypoglycemia is a complication that can result from too much insulin, exercise, decreased food intake, etc. Always check your blood glucose before changing the rate of insulin delivery from your pump.

HOME CARE INSTRUCTIONS

- Monitor your blood glucose at least 3-4 times a day and before any change in rate of glucose delivery.
- You still need to pay attention to the basics of diabetes care, including:
  - Consistent exercise.
  - Consistent meal times.
  - Consistent portion sizes.
  - Weight control.
- Your caregiver will help you monitor your glucose control and check your A1c at regular intervals.
- Always carry extra pump supplies in case there is a problem with the pump. Also always carry extra syringes and insulin so you can give an injection if needed.
- Call your caregiver as instructed if you have ANY QUESTIONS about the function of your pump.

SEEK MEDICAL CARE IF:

- You have an infection or irritation at the insulin infusion site. For example:
  - Pain.
  - Skin redness that is worsening.
  - Red streaking of the skin extending away from the infusion site.
  - Pus or cloudy fluid coming out of the infusion site.

- You have an oral temperature above 102° F (38.9° C).
- Your pump is not working for any reason.
- Your blood glucose is not controlled within the guidelines set by your caregiver.

Document Released: 10/15/2010 Document Re-Released: 03/14/2011
ExitCare® Patient Information ©2011 ExitCare, LLC.