

# Insulin Pump therapy

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# Indications

- Indicated for both T1 and T2DM
- Elevated HbA1c
- Excessive glycaemic variability
- Recurrent hypoglycaemia, nocturnal hypoglycaemia, activity induced hypoglycaemia and hypoglycaemia unawareness
- Pregnancy/pre-pregnancy

# Indications

- Recurrent diabetic ketoacidosis/hospitalizations
- Dawn phenomenon
- Gastroparesis
- Patient preference, meal-timing flexibility and normalization of lifestyle
- Low insulin requirements (not easily measured by syringe)
- Inability to self-administer insulin
- Inability to predict food or meal intake

# Patient requirements

- Responsible and psychologically stable
- Willingness to monitor capillary glucose at least 4 times per day
- Willingness to quantify food (CHO) intake, and to understand effect of fat content of food
- Willingness to comply with medical follow up

# Benefits

- Improved glycaemic control and decreased glycaemic variability
- Improved control of dawn phenomenon
- Decreased severity and frequency of hypoglycaemia
- Increased flexibility, normalization of lifestyle and sense of well being

# Precautionary areas

- Hyperglycaemia and/or DKA if insulin infusion is interrupted
- Lipohypertrophy (when infusion sites are not rotated properly)
- Infusion site reactions (rash and skin irritation) or infection

# Transitioning to pump therapy

- Goal: Eliminate as much intermediate/long acting insulin as possible before starting pump
  - Stop intermediate-acting insulin 12 hours before , and long acting insulin 24 hours before initiating pump therapy
  - Have patient give injections using small amounts of rapid acting insulin as needed (every 3-4hrs) to keep BGs acceptable until pump therapy commenced
  - In situations when