

Insulin Therapy in Gestational Diabetes

Position of insulin in GDM treatment recommendations from different societies

- **American Diabetes Association-2018:**
 - Insulin is the preferred agent for management of diabetes in pregnancy. (E)
- **American College of Obstetricians and Gynecologists-2018:**
 - When pharmacologic treatment of GDM is indicated, insulin is considered the preferred treatment for diabetes in pregnancy. (A)
- **Iranian societies** (Iran Endocrine Society/NAIGO/Iranian Scientific Society of Perinatology)-2017:
 - Insulin is the first-line medical therapy in GDM.

Insulin types

- Human insulin (NPH, Regular)
- Insulin analogues:
 - Rapid-acting: Aspart, Glulisine, Lispro
 - Long-acting: Detemir, Glargine
 - Ultra long-acting: Degludec
 - Pre-mixed
- None of the currently available insulin preparations have been demonstrated to cross the placenta.

Insulin dose

- The majority of studies have reported a total insulin dose ranging from 0.7 to 2 units per kg (present pregnant weight) to achieve glucose control.
- The dose and type of insulin used is calculated based upon the specific abnormality of fasting or postprandial blood glucose noted during monitoring.
- Adjustments in insulin dosage in response to high glucose values are typically in the range of 10-20%.
- Twin gestations complicated by GDM may require an approximate doubling of the insulin requirement throughout pregnancy.



*Thank
you*