Gestational Diabetes Mellitus (GDM)

Prelims: *Current events of national and international importance | Health*

Why in news?

A recent study indicates a surge in early-onset gestational diabetes in India, with glucose intolerance detected earlier than the typical 24–28 weeks of gestation.

- **Gestational Diabetes Mellitus (GDM) –** It is a condition in which ***pregnancy hormones block insulin's effectiveness***, leading to high blood sugar levels.
- **Causes**
  - The placenta produces hormones (estrogen, cortisol, human placental lactogen) that interfere with insulin.
  - This "***contra-insulin effect***" begins around ***20–24 weeks***.
  - Normally, the pancreas compensates by producing more insulin. If it cannot, gestational diabetes develops.
- **Risk Factors**
  - **Medical –** Heart disease, high blood pressure, obesity, PCOS, prediabetes.
  - **Family history –** Type 2 diabetes or prior gestational diabetes.
  - **Demographics –** Age over 25, higher risk in South/East Asian, Latino, Native American, and Pacific Islander women.
- **Symptoms –** Often develops without clear warning signs, but sometimes can include increased urination, excessive thirst, fatigue, nausea.
- **Diagnosis**
  - **Early screening** at the first prenatal visit for women with risk factors.
  - **Standard testing** at 24–28 weeks for all pregnant women.
  - **Postpartum screening** - 6–12 weeks after delivery to check for persistent diabetes.
  - **Long-term monitoring** - women with GDM should be screened every 3 years for type 2 diabetes.
- **Complications**

    - **For mother** – Breathing problems, premature birth, obesity, higher chance of C-section, pre-eclampsia, and later type 2 diabetes.
    - **For baby** – Macrosomia (large birth weight), Hypoglycemia (low blood sugar after birth) after birth,
- **Treatment –** Dietary changes tailored to keep blood sugar normal, regular exercise, daily blood glucose monitoring, insulin injections if lifestyle changes aren't enough.

*India has a **diabetes crisis** - In 2024, about 90 million adults had the disease, the **2nd highest number in the world after China**. By 2050, this figure may grow to more than 156 million.*

References

1. The Hindu | A study conducted to know about Gestational Diabetes
2. John Hopkins Medicine | Gestational Diabetes
3. Cleveland Clinic

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