

## Gestational Diabetes and Risk of Developing IDDM

We read the letter by Quatraro et al. (1) referring to pregnancy as an environmental factor precipitating insulin-dependent diabetes mellitus (IDDM), and we would like to report an additional patient who may support this hypothesis.

A 35-yr-old woman (with 4 children) was referred to our center in February 1989 with a history of polyuria and a 12-kg weight loss over the previous 2 mo. In November 1987, she was referred for the first time while pregnant (24 wk) because of a history of gestational diabetes mellitus (GDM) during her third pregnancy, which resulted in a normal delivery in 1985. In November 1987, a 50-g oral glucose tolerance test (OGTT) showed a 1-h plasma glucose of 8.6 mM and an OGTT that was also diagnostic of GDM (2,3). She was instructed on dietary treatment, and the pregnancy and delivery were uneventful.

In February 1989, because of significant symptomatology, we decided to test the patient for IDDM, despite her history of GDM in two consecutive pregnancies. An OGTT designed to determine insulin levels showed the following results: 0 min, glucose 17 mM, insulin 5  $\mu$ U/ml; 30 min, glucose 20 mM, insulin 7.4  $\mu$ U/ml; 60 min, glucose 23.5 mM, insulin 9  $\mu$ U/ml; and 120 min, glucose 22.4 mM, insulin 6  $\mu$ U/ml. Laboratory tests were normal for thyroid and kidney function. Currently, the patient is on insulin therapy and is asymptomatic.

This case stresses the complexity of the natural history

of IDDM. Obviously, during the last two pregnancies, the patient was classified as having GDM on the basis of an abnormal OGTT. The fact that she did not need insulin therapy suggests that the production of endogenous insulin was enough to maintain an acceptable control of blood glucose levels. Between the last delivery in February 1988 and the development of classic symptoms of diabetes in November 1988,  $\beta$ -cell function became significantly impaired to the point that endogenous insulin dropped to levels compatible with diagnosis of IDDM. Follow-up studies of GDM patients may be necessary to better understand the natural history of IDDM that develops after pregnancy.

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### REFERENCES

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