

Inadequate post-partum screening for type 2 diabetes in women with previous gestation diabetes mellitus: a retrospective audit of practice over 17 years

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Abstract

Introduction: Women with gestational diabetes (GDM) are at greatly increased risk of type 2 diabetes (T2DM). The UK guidance recommends screening for T2DM at around 6 weeks post-partum and annually thereafter. We evaluated conformity to this guidance in two separate time periods. **Methods:** The proportion of tests performed within guidance was assessed using longitudinal plasma glucose and glycated haemoglobin data in two cohorts (1999-2007, n=251; 2015-2016, n=260) from hospital records on women previously diagnosed with GDM. **Results:** In the 1999-2007 and 2015-2016 cohorts, 59.8% and 35.0% of women had the recommended post-partum testing, respectively ($p < 0.001$); just 13.5% and 14.2%, respectively, underwent the first annual test on time. During long-term follow-up of the 1999-2007 cohort (median follow-up: 12.3 years), the proportion of women tested in any given year averaged 34.2% over a 17-year period; there was a progressive decline in the proportion of women receiving a yearly test with time since delivery ($p = 0.002$). Over the follow-up period, 85 women from the 1999-2007 cohort developed blood test results in the diabetic range with a median time to presumed DM diagnosis of 5.2 years (range 0.11-15.95 years). Kaplan-Meier analysis showed that 18.8% of women had blood test results in the diabetes range by 5 years and 37.8% by 10 years post-partum. **Conclusions:** Despite high profile guidelines and a clear clinical rationale to screen women with a past diagnosis of GDM, many women did not receive adequate screening for T2DM, both in the short- and long-term. This suggests alternative approaches are needed to ensure effective follow-up of this high-risk group. To have an impact, interventions need to be tailored to a young, generally healthy group in which traditional approaches to follow-up may not be best suited.

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