The Impact of New National Guidelines on Screening for Gestational Diabetes Mellitus

Abstract:
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Gestational diabetes mellitus (GDM) has important maternal and fetal implications. In 2010, the Health Service Executive published guidelines on GDM. We examined the impact of the new guidelines in a large maternity unit. In January 2011, the hospital replaced the 100g Oral Glucose Tolerance Test (OGTT) with the new 75g OGTT. We compared the first 6 months of 2011 with the first 6 months of 2010. The new guidelines were associated with a 22% increase in the number of women screened from 1375 in 2010 to 1679 in 2011 (p<0.001). Of the women screened, the number diagnosed with GDM increased from 139 to 221 (p=0.001). The combination of increased screening and a more sensitive OGTT resulted in the number of women diagnosed with GDM increasing from 139 to 221 (a 64.4% increase) (p=0.001). A total of 12,487 women were invited to have an OGTT to screen for GDM, although only 44% attended OGTT. A total of 75% (n=9347) of women who delivered a baby weighing 500g or more was 4289 for the first 6 months of 2010 compared with 4184 in 2011. As the new guidelines were published in August of 2010, we compared the results from the first 6 months of 2011 with the first 6 months of 2010 compared with 4184 in 2011. Approximately a third of women attending antenatally were screened on a selective basis. A combination of maternal obesity and family history had the highest incidence of abnormal OGTT at 23.4%. Of women screened, the incidence of GDM was 15.1% (n=78) out of 518 women >35 years, compared with 12.3% (n=143) out of 1161 women <35 years (NS).

The introduction of the national guidelines was associated with an increase in OGTTs performed from 1375 in the first half of 2010 to 1679 in the first half of 2011 (a 22% increase) (p<0.001). Of the women screened, the number of abnormal OGTTs increased from 10.1% (n=139) in 2010 to 13.2% (n=221) in 2011 (p=0.001). The combination of increased screening and a more sensitive OGTT resulted in the number of women diagnosed with GDM increasing from 139 to 221 (a 64.4% increase) (p=0.001). The number of fasting glucose levels deemed abnormal increased from 51 to 106 in 2011 (a 127% increase) (p<0.001). It follows that the number of women who should be referred postnatally for an OGTT to confirm that gestational diabetes mellitus is present will also need to increase by 59%.

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References

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