



Joint Position Statement on Universal Screening for GDM in Europe

FIGO, EBCOG and EAPM

The alarming increase of obesity and related hyperglycemia in pregnancy (HIP) is a global issue which needs urgent attention. Obesity (BMI ≥ 30 kg/m²) during pregnancy is of particular concern because of the increased risks for both the mother and child [1]. The prevalence of maternal obesity in EU countries varies from 7 to 25% [2], and has been shown to increase in some regions from 10.2% in 2009 to 11.4% in 2014 [1].

The growing burden of diabetes is becoming a major threat to women's health. Hyperglycemia can impact her whole sexual and reproductive life and beyond, starting from increased frequency of urogenital infections, infertility and difficulty in conception, to early pregnancy loss, to complications during pregnancy, delivery and in the immediate post-partum period, to early onset of type 2 diabetes and higher risk for premature cardiovascular diseases, etc [3]. HIP, including Gestational Diabetes Mellitus (GDM), accounts for 1 in 6 live births globally (16.8%) and 16% of these may be due to overt diabetes in pregnancy and the rest due to GDM [4]. Although infant and maternal mortality in Europe is generally quite low, and continues to decline, perinatal mortality and morbidity, such as that associated with HIP, remains a major concern [5].

Selective testing of pregnant women based on clinical risk factors for GDM evolved from the view that in populations with a low risk of GDM, subjecting all pregnant women to a laboratory test was not considered cost-effective. Traditionally, the risk factor-based approach was popular in Europe. Some of the afore mentioned risk factors used were: age and BMI (at varying thresholds); ethnicity; polyhydramnios; macrosomia (current or past pregnancy); GDM in the past; unexplained stillbirth; T2DM in a first-degree relative; and PCOS. However, variations in risk factors have resulted in different approaches, generally with poor sensitivity and specificity. The major problem of risk factor-based screening is its high demand on the healthcare providers with more complex protocols for testing, which result in lower compliance by both patients and healthcare providers [6].

Given the high rates of hyperglycemia in pregnancy in most populations and that selective testing based on known risk factors has poor sensitivity for detection of GDM, it seems appropriate to recommend universal rather than risk factor-based testing [6]. This approach is strongly recommended by FIGO, EBCOG and EPAM.

In 2010 the IADPSG proposed screening of all pregnant women with a single step 75-g OGTT [7]. This position has since been supported by the ADA and the IDF (2014) [8]. However, there continues to be a lack of uniformity of testing protocols within and between hospitals in the same city, county, and country [9], let alone internationally. The case for universal testing (i.e. testing all pregnant

women) with some biochemical test has its supporters [10,11]. However, even among advocates of universal testing there is a lack of uniformity in approach to testing methodology.

- (1) The 50-g glucose challenge test (GCT) has been the most popular test for this purpose. This is part of the two-step algorithm (50-g GCT followed by the 100-g OGTT) still advocated by ACOG and offered as an alternative diagnostic strategy in the latest ADA guideline.
- (2) The 1-step 75-g OGTT in all women is endorsed by the WHO, IDF, and many other organizations that agree with the recommendations of the IADPSG.

In the overall cost of providing care to women with GDM the cost of administering a glucose tolerance test (GTT) to all pregnant women is likely to be minimal if the initial fasting GTT level result can be used to decide if the full GTT is needed [12,13].

Currently, only 35.7% (n 10) of EBCOG members recommend universal testing for GDM in pregnancy at ≥ 24 weeks [14]. This low proportion is compounded by the lack of consensus on the best method of universal testing in Europe, including by large international scientific organisations [15].

Clearly a universal approach to both testing and type of testing is needed and thus, building on the jointly agreed Barcelona Declaration on Hyperglycemia in Pregnancy [16], FIGO, EBCOG and EAPM jointly recommend that all pregnant women should be tested for hyperglycemia during pregnancy using a 1-step 75-g OGTT procedure. Each organisation is calling on its countries, members and stakeholders to promote measures and strategies to ensure that universal testing is implemented in their countries and regions. Whilst there is evidence that universal testing for hyperglycemia in pregnancy is cost effective in some settings [17,18], FIGO, EBCOG and EPAM recognise that cost limitations may prove too much for some countries, these countries still have an obligation to implement the best GDM testing and management practices that they can.

Sections of this were taken from guidelines published in the *International Journal of Gynecology and Obstetrics* (2015 Oct;131 Suppl 3:S173-211)

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