

Detection and Diagnosis of Overt Diabetes During Pregnancy

Thomas Owen*

Department of Medical Science, King's College London, United Kingdom.

ABSTRACT

The International Workshop-Conferences on GDM have defined the condition as “any degree of glucose intolerance with onset or first recognition during pregnancy”. The definition has applied whether or not insulin is used for treatment or hyperglycemia persists after pregnancy. The possibility that unrecognized glucose intolerance antedated the pregnancy is not excluded. This facilitates a uniform strategy for detection and classification of GDM but has limitations. As ongoing epidemics of obesity and diabetes result in more type 2 diabetes in young women, the number who are undiagnosed (before pregnancy) is increasing. The need to identify these women and address perinatal risks that may be particular to their greater degree of hyperglycemia is becoming more important. The IADPSG Consensus Panel reviewed the current knowledge base during the IADPSG meeting.

Keywords: Erectile Dysfunction; Placenta; Sexual Pains; Progesterone.

INTRODUCTION

The recommendations summarized below are the opinions of the IADPSG Consensus Panel. The issue of classification of women with likely pre pregnancy diabetes (overt diabetes) first noted during pregnancy was addressed via presentations by experienced clinicians/researchers (Yasue Omori, Lois Jovanovic, Elisabeth Mathiesen, and Siri Kjos), accompanied by interactive discussion. Several arguments were made for identifying as a distinct group woman with overt diabetes: Increased risk of congenital anomalies in offspring [1]. Risk of diabetes complications (nephropathy and retinopathy) requiring treatment during pregnancy. Need for rapid treatment and close follow-up during pregnancy to ensure prompt restoration of normal glycemia. Need to ensure confirmation and appropriate treatment of diabetes after pregnancy.

Identification of overt diabetes When and how to identify women with overt diabetes during pregnancy (not previously diagnosed) and how to define overt diabetes were considered during the IADPSG Pasadena meeting and subsequently. There was uniform agreement that this assessment should be made during the initial visit for prenatal care. There was debate about performing universal early testing or limiting testing to those women classified as high risk according to locally defined criteria. It was acknowledged that background population prevalence of diabetes in young women and extent of previous testing for metabolic disturbances vary greatly in different regions. Furthermore, it has not been determined whether universal testing early in pregnancy.

to detect overt diabetes is either of clinical value or cost-effective IADPSG Consensus Panel members favored use of any available certified laboratory measure of glucose (FPG, random plasma glucose, or A1C) for initial detection of possible cases. An expert committee recently recommended that an A1C value (measured in a laboratory standardized/aligned with the Diabetes Control and Complications Trial [DCCT]/UK Prospective Diabetes Study [UKPDS] assay) be used for diagnosis of diabetes outside pregnancy.

Although many IADPSG Consensus Panel members favored using A1C for detection of overt diabetes in pregnancy, it was not feasible to recommend a single test to use exclusively [2]. Cost and standardization of A1C testing are issues for consideration, and hemoglobin variants are prevalent in some populations. Attending the first prenatal visit in the fasting state is impractical in many settings. Consensus thresholds recommended for the individual glycemia measures are indicated.

A tentative diagnosis of overt diabetes based on measurement of random plasma glucose must be confirmed with either an FPG or A1C value greater than or equal to the threshold using a DCCT/UKPDS standardized/aligned method. It is desirable to detect overt diabetes in pregnancy as early as possible to provide an opportunity to optimize pregnancy outcome [3]. However, there is variability in time of enrolment for prenatal care beyond the control of health care providers. Accordingly, no limit is placed on the timing of initial assessment for detection of overt diabetes in pregnancy.

*Correspondence to: Thomas Owen, Department of Medical Science, King's College London, United Kingdom. E-mail: town@gmu.edu

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However, if enrolment is at weeks' gestation or later and overt diabetes is not found, the initial test should be followed by a 75-g OGTT. This report represents the opinions of individual members of the IADPSG Consensus Panel and does not necessarily reflect the position of the organizations they represent [4]. It is expected that this report will be considered by diabetes, obstetric, and other organizations and will serve as the basis for internationally endorsed criteria for the diagnosis and classification of diabetes in pregnancy.

Gestational diabetes mellitus (GDM), a common medical complication of pregnancy, is defined as "any degree of glucose intolerance with onset or first recognition during pregnancy". The initial criteria for its diagnosis were established more than 40 years ago and, with modifications, remain in use today [5]. These criteria were chosen to identify women at high risk for development of diabetes after pregnancy or were derived from criteria used for nonpregnant individuals and not necessarily to identify pregnancies with increased risk for adverse perinatal outcome.

There is consensus that overt diabetes during pregnancy, whether symptomatic or not, is associated with significant risk of adverse perinatal outcome. The risk of adverse perinatal outcome.

associated with degrees of hyperglycemia less severe than overt diabetes is controversial. Several factors contribute to this longstanding controversy.

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