THE DIAGNOSIS OF GESTATIONAL DIABETES MELLITUS AFTER BARIATRIC SURGERY: ARE WE OFF TARGET?

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Background:
Bariatric surgery (BS) is increasingly being undertaken by obese women prior to pregnancy.

No guidelines exist for screening and diagnosis of GDM after BS. Oral Glucose Tolerance Test (OGTT) profiles differ in BS patients, frequently resulting in reactive hypoglycaemia.

The utility of the OGTT for GDM diagnosis after BS requires validation and reconsideration.

Aims:
[1] To determine from the literature, published testing methods and diagnostic criteria for GDM after BS, and
[2] To explore by survey, current approaches to GDM diagnosis post-BS across Australia.

Methods [1]:
A literature review identified twelve studies reporting GDM prevalence after BS.

A one-page questionnaire was sent to National Association of Diabetes Centres (NADC) and Australasian Diabetes in Pregnancy Society (ADIPS) members to ascertain testing methods and GDM diagnostic criteria being used in BS-treated women.

Results [1]:
Criteria applied to diagnose GDM were not specified by 75% of studies. Most studies that did, applied OGTT criteria equally to BS women and non-BS women. See Table 1.

Results [2]:
Nineteen surveys were returned Australia-wide. Gastric Banding was the procedure most commonly encountered.

Eleven centres use the OGTT applying ADIPS criteria equally in women with and without a BS history. Five centres use a combination of diagnostic methods.

Conclusions:
Limitations of the OGTT in GDM diagnosis after BS are under-recognised.

OGTT remains the most widely utilised diagnostic test in this context.

Examples of alternatives include Continuous Glucose Monitoring, fasting and 2-hour post-prandial glucose levels, HbA1c or a combination at 24-28 weeks gestation. These methods are yet to be tested in clinical trials or endorsed.

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Reference:

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