

GIGT and GDM Tied to Similar Adverse Outcomes

BY ROBIN TURNER
Senior Editor

Gestational impaired glucose tolerance, defined by a single abnormal value at 1 hour during the oral glucose tolerance test, is associated with many of the same adverse outcomes as gestational diabetes mellitus, including postpartum glycemia, insulin resistance, and β -cell dysfunction, according to the results of a recent study.

Investigators evaluated metabolic function and outcomes in a cohort of more than 360 women stratified by glucose tolerance status during pregnancy. The participants underwent an antepartum glucose challenge test (GCT) and a 3-hour oral glucose tolerance test (OGTT), an assessment of obstetric outcome at delivery, and a metabolic characterization by OGTT at 3 months post partum.

The investigators identified five study groups: those with gestational diabetes mellitus (GDM), 1-hour gestational impaired glucose tolerance (GIGT), 2- or 3-hour GIGT, abnormal glucose challenge test (GCT) with normal glucose tolerance (NGT), and normal GCT with NGT (Diabetes Care 2008;31:1275-81). There were no significant differences among the groups with respect to mean age, smoking status, and parity.

The researchers noted the 1-hour GIGT group had adverse outcomes similar to the group with gestational diabetes mellitus, although the GIGT group did not have increased infant birth weight. The "Caesarian section rate was highest in the 1-hour GIGT group; there were no significant differences [among] the four non-GDM groups," wrote Dr. Ravi Retnakaran of the Leadership Sinai Centre for Diabetes, Mount Sinai Hospital, Toronto, and his colleagues.

In addition, there were no significant differences among the four non-GDM groups with respect to length of gestation, infant sex, or Apgar scores.

At 3 months post partum, glycemic parameters progressively increased from normal glucose challenge test with normal glucose tolerance to abnormal glucose challenge test with normal glucose tolerance to 2- or 3-hour gestational impaired

glucose tolerance to 1-hour GIGT to gestational diabetes mellitus. Insulin sensitivity and β -cell function progressively decreased across the groups in the same manner.

Participants in the normal GCT NGT group underwent the 3-hour oral glucose tolerance test at a median of 32 weeks' gestation, compared with a median of 29 weeks' gestation for the other four groups.

Gestational diabetes mellitus is a metabolically heterogeneous disorder, which

could lead to a higher risk of developing type 2 diabetes in the years following pregnancy.

Short term, there is an increased risk of adverse obstetric outcomes related to fetal overgrowth and higher birth weight. Long term, women with a history of GDM have chronic insulin resistance and β -cell dysfunction.

One limitation of the current study is the relatively modest number of participants with GIGT (28), wrote Dr. Ret-

nakaran and his colleagues. Still, they said the issue warrants further investigation, including long-term follow-up to determine the risk of type 2 diabetes and appropriate cost-benefit evaluation of postpartum care strategies.

Dr. Retnakaran also is in the division of endocrinology and metabolism at the University of Toronto.

The study was supported by a grant from the Canadian Institutes of Health Research. ■

Find out more about
a therapy she can stay with.



VAGIFEM®
What's not to love?



It's clean.
It's simple.
It's convenient.

It's effective.¹
It's well tolerated.¹

FOR INFORMATION VISIT NOVOMEDLINK.COM.

Please see adjacent page for brief summary of prescribing information.

Vagifem® is a registered trademark of Novo Nordisk FemCare AG.

THE THERAPY SHE CAN STAY WITH



Reference: 1. Rioux JE, Devlin MC, Gelfand MM, Steinberg WM, Hepburn DS. 17 β -Estradiol vaginal tablet versus conjugated equine estrogen vaginal cream to relieve menopausal atrophic vaginitis. *Menopause*. 2000;7:156-161.

© 2008 Novo Nordisk Inc. Printed in the U.S.A. 134966 April 2008

VAGIFEM®
estradiol vaginal tablets

Vagifem® is indicated for the treatment of atrophic vaginitis.

IMPORTANT SAFETY INFORMATION

ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent, case-controlled studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incident rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer-reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade.

The three case-controlled studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed, on at least a semiannual basis, to determine the need for continued therapy.

Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or reoccurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equi-estrogenic doses.

Other warnings include: induction of malignant neoplasms, gallbladder disease, effects similar to those caused by estrogen-progestogen oral contraceptives (such as thromboembolic disease, hepatic adenoma, elevated blood pressure, worsening of glucose tolerance), hypercalcemia, and rarely, trauma induced by the Vagifem® applicator.

In a placebo-controlled clinical trial, the most commonly reported adverse events included: headache (9%), abdominal pain (7%), upper respiratory tract infection (5%), genital moniliasis (5%), and back pain (7%).

The use of Vagifem® is contraindicated in women who exhibit one or more of the following: known or suspected breast carcinoma, known or suspected estrogen-dependent neoplasia, e.g., endometrial carcinoma, abnormal genital bleeding of unknown etiology, known or suspected pregnancy, porphyria, hypersensitivity to any Vagifem® constituents, active thrombophlebitis or thromboembolic disorders, or a past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast malignancy).

THE LEADER
IN NEWS
AND
MEETING
COVERAGE

Ob.Gyn. News

Thanks For
Making Us #1

Source: The Nielsen Company, Focus®
Medical/Surgical June 2008 Readership Summary;
Obstetrics and Gynecology Section, Tables 701 and 702
Projected Average Issue Readers.