ASSESSMENT OF THE LEVATOR HIATUS AREA BY THREE-DIMENSIONAL ULTRASOUND FROM PREGNANT WITH GESTATIONAL DIABETES.

Hypothesis / aims of study

Current evidences suggest that diabetes during pregnancy damages the striated muscle, a fact that may explain the high prevalence of urinary incontinence and pelvic floor dysfunction in women with gestational diabetes mellitus (GDM). (1-3) The Hypothesis of this study is that women with GDM may have more changes in the pelvic floor muscle, in the area of levator Hiatus, when compared with normoglycemic pregnant women.

The aim of study was evaluate and compare the Levator Hiatus area assessed at second trimester and later, at third trimester, by transperineal Three-dimensional Ultrasound from pregnant women with GDM.

Study design, materials and methods

A longitudinal study was conducted between March and December 2015, on 18 pregnant women, divided into 2 groups: 9 with GDM and 9 normoglycemic, according to 2015 American Diabetes Association criteria.

This study was approved by a Research Ethics Committee. The women who agreed to voluntarily participate in the study signed a consent form. The inclusion criteria were: singleton pregnancy and nulliparity. The exclusion criteria were: previous Diabetes pregnancy complicated with Gestational Diabetes.

In conclusion, this study suggests that there are anatomical changes observed by 3D ultrasound of the pelvic floor during pregnancy. 3

Interpretation of results

Both groups were similar when related to Age and Maternal weight gain. GDM group had Levator Hiatus area at second trimester significantly higher than that observed in the normoglycemic group. No significant differences were found between the groups at third trimester.

Concluding message

In conclusion, this study suggests that there are anatomical changes observed by 3D ultrasound of the pelvic floor during pregnancy complicated with Gestational Diabetes. Further studies are needed to elucidate the potential role of GDM in the anatomical and functional changes of pelvic floor during pregnancy.

References


Disclosures

Funding: - Clinical Trial: No Subjects: HUMAN Ethics Committee: Comitê de Ética em Pesquisa da Faculdade de Medicina de Botucatu Helsinki: Yes Informed Consent: Yes