



Association between intrahepatic cholestasis in pregnancy and gestational diabetes mellitus.

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Introduction

Gestational diabetes mellitus (GDM), with incidence of 3-9%, is the major metabolic cause of maternal and perinatal morbidity. Intrahepatic cholestasis of pregnancy (ICP) is a liver-specific disorder affecting approximately 1-2% of pregnant women. As both of the conditions are connected with metabolic disorders it was suspected that the occurrence of them might be correlated.

The aim of the study was to evaluate the association between ICP and GDM.

Materials and Methods

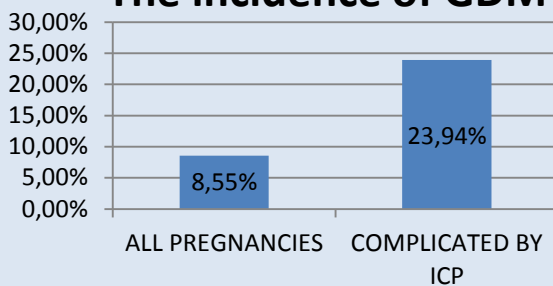
A retrospective study included 3826 pregnant women managed at 1st Department of Obstetrics and Gynecology Medical University of Warsaw between January 2015 and December 2016. 71 of them were complicated by ICP (1.86%) and 327 by GDM (8.55%). The group complicated by ICP was divided into two subgroups: ICP without GDM (Group I, 54 patients) and ICP with GDM (Group II n=17). Demographic and clinical outcome data (including maternal age, BMI, infant weight and gender) and ICP and GDM biochemical markers were collected.

Results

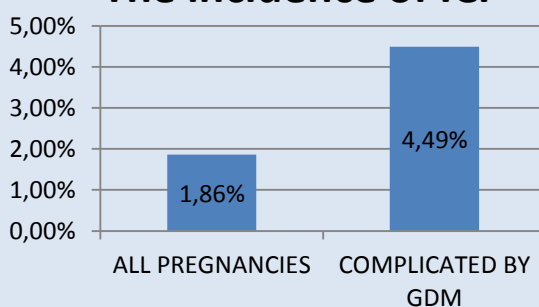
The incidence of GDM in ICP was 23.94% (17/71, OR= 3.19 CI 1.75-5.76). There were no reported cases of stillbirth, but there was no statistical difference probably due to small group of patients.

ICP	Group I with GDM	Group II without GDM	P value
BMI before pregnancy	23,84	26,42	0,025
Weight gain	12,02	9,72	0,037
Level of platelets	241,19	193	0,048
Level of total bilirubin	0,65	0,44	0,013
Gestational age at birth	251,46	250,3	0,2
Maternal age	31,36	32,59	0,07
ALT	197,6	191,18	0,23
AST	109,87	102,59	0,2
Bile acids	33,53	38,18	0,17
Infant weight	2743,1	2656	0,17
Apgar scale	9,71	9,66	0,2

The incidence of GDM



The incidence of ICP



Conclusions

These data support the hypothesis that the incidence of GDM is higher in women developing ICP.