Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Table 1.

Patient characteristics	Non-PAS (N=290)	PAS (N=144)	p-value
Race			0.013
Asian	8 (2.8%)	7 (4.9%)	
Black	182 (63.0%)	65 (45.1%)	
Hispanic	25 (8.7%)	18 (12.5%)	
Other	3 (1.0%)	2 (1.4%)	
White	71 (24.6%)	52 (36.1%)	
Age, mean (SD)	31.61 (5.22)	33.22 (4.98)	0.004
BMI at delivery, median (IQR)	43 (31.5, 56.64)	32 (27, 37.2)	<0.001
GA at delivery, median (IQR)	37.3 (36.15, 38.5)	35.1 (34, 36)	<0.001

Table 2.

Neonatal complications	Non-PAS (N=290)	PAS (N=144)	p-value
Intraventricular Hemorrhage (IVH)	1 (0.3%)	0 (0.0%)	0.48
Necrotizing enterocolitis (NEC)	0 (0.0%)	1 (0.7%)	0.16
Neonatal Death	3 (1.0%)	0 (0.0%)	0.22
Neonatal Anemia	13 (4.5%)	4 (2.8%)	0.39
Thrombocytopenia	5 (1.7%)	1 (0.7%)	0.39
Respiratory Complications	59 (20.4%)	52 (36.1%)	<0.001

1183 Assessment of abnormal serum analytes in low-risk patients for the prevention of adverse pregnancy outcomes

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OBJECTIVE: To determine the occurrence rate of various adverse pregnancy outcomes in a subset of patients with abnormal serum analytes who screen low-risk for trisomy 21 and 18 on first trimester screening for fetal aneuploidy in a Canadian centre.

STUDY DESIGN: A chart review was conducted to identify pregnant women who completed first trimester screening for fetal aneuploidy in Regina, SK, Canada between January 1, 2010 and December 31, 2019. Data was collected for patients who screened low-risk for trisomy 21 and 18, had a normal karyotype and/or cell free DNA result and had serum analytes matching a combination of PAPP-A < 0.3MoM *and* fßhCG < 0.5MoM *or* > 2.5MoM. Individual and composite rates of adverse pregnancy outcomes including preterm birth, small for gestational age, preeclampsia and stillbirth were determined, as well as any potential adverse neonatal outcomes.

RESULTS: A total of 103 charts containing the necessary patient information were available and reviewed. Patient's average age was 28.6 ±5.2 years and average BMI was 28.5 ±7.1. Spontaneous abortion occurred in 23.3% (95% CI 15.1 − 31.5). The occurrence of the composite adverse pregnancy outcome was 36.4% (95% CI: 25.6 − 47.1); preterm birth: 18.2% (95% CI: 9.6 − 26.8), small for gestational age: 16.9% (95% CI: 8.5 − 25.3), preeclampsia: 3.9% (95% CI: N/A), and stillbirth: 2.6% (95% CI: N/A). A composite adverse neonatal rate (NICU admission, cord pH < 7.0, APGAR at 5 min < 7, and/or any other neonatal concern documented by a healthcare professional) was 26.6% (95% CI: 16.7 − 36.7).

CONCLUSION: This study identifies a significant increased risk of individual and composite adverse pregnancy and neonatal outcomes in the studied population. Appropriate obstetrical care, monitoring and timely delivery is imperative to decrease morbidity and mortality. Initial review of first trimester aneuploidy screening results may provide an opportunity to identify a low-risk patient at higher risk of adverse pregnancy and/or neonatal outcomes and guide management according to risk.

1184 Gestational Diabetes Mellitus: a Risk Factor for COVID-19

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OBJECTIVE: Diabetes mellitus (DM) has been reported as a risk factor for coronavirus infectious disease 2019. Whether gestational diabetes mellitus (GDM) also poses an increased risk for COVID-19 has not been studied. We aimed to evaluate whether GDM increases the risk for COVID-19 during pregnancy.

STUDY DESIGN: We conducted a retrospective, multicenter case-control study to understand the association between COVID-19 in pregnancy and neonatal outcomes. We reviewed consecutive charts of adult females, ages 18-45, with laboratory-confirmed SARS-CoV-2 infection in six months between March 1, 2020, and August 31, 2020. Cases were patients diagnosed with COVID-19 during pregnancy [COVID (+)], whereas controls were pregnant patients who tested negative for COVID-19 [COVID (-)]. We excluded cases with multiple gestation or incomplete data. We employed PSM to lessen the potential influence of confounding factors and increase the reliability of the results. The PSM was performed using age, race/ethnicity, body mass index, and past medical history (hypertension, cardiac disease, asthma, DM, venous thromboembolism). Analyses were performed with SAS software.

RESULTS: A total of 2474 patients were identified, of which 2374 were COVID (-) and 100 COVID (+). The incidence of GDM was higher in the COVID (+) group [16 (16%) vs. 207 (8.7%), p=0.02]. After the PSM algorithm was applied, 400 patients remained in COVID (-) group and 100 in the COVID (+) group. The incidence of GDM remained higher in the COVID (+) group [16 (16%) vs. 34 (8.5%), p=0.03] comparted to COVID (-) group.

CONCLUSION: The incidence of GDM was twice as high in the COVID (+) group even after adjusting for age, race/ethnicity, body mass index, and past medical history (hypertension, cardiac disease, asthma, DM, venous thromboembolism). Based on our study's results, GDM appear to increase the risk of COVID-19.

Table 1. Non-propensity score matched, and propensity-score matched characteristics.

Characteristics	Non-propensity score matched				Propensity score matched			
	Total (n=2474)	COVID (-) (n=2374)	COVID (+) (n=100)	*p*-value	Total (n=500)	COVID (-) (n=400)	COVID (+) (n=100)	*p*-value
Age, median(IQR)	30 (26, 34)	30 (26, 34)	29 (24.5, 33.5)	0.3	29 (24, 34)	28.5 (24, 34)	29 (24.5, 33.5)	0.7
Race/ ethnicity, n(%)				<0.001				0.5
Asian	101(4.1)	99(4.2)	2(2)		10(2)	8(2)	2(2)	
Black/ African-American	839(33.9)	805(33.9)	34(34)		167(33.4)	133(33.3)	34(34)	
White	1053(42.6)	1038(43.7)	15(15)		78(15.6)	63(15.8)	15(15)	
Hispanic	354(14.3)	306(12.9)	48(48)		244(48.8)	196(49)	48(48)	
Other	127(5.1)	126(5.3)	1(1)		1(0.2)	0	1(1)	
BMI, median(IQR)	30.9 (26.9, 36)	30.8 (26.9, 36)	32 (28.2, 36.7)	0.07	32 (27.7, 37.1)	32.1 (27.4, 37.2)	32 (28.2, 36.7)	0.7
PMH, n(%)	1382(55.9)	1329(56)	53(53)	0.6	265(53)	212(53)	53(53)	1.0
HTN, n(%)	212(8.6)	200(8.4)	12(12)	0.2	48(9.6)	36(9)	12(12)	0.4
Cardiac disease, n(%)	37(1.5)	35(1.5)	2(2)	0.7	12(2.4)	10(2.5)	2(2)	1.0
Asthma, n(%)	338(13.7)	329(13.9)	9(9)	0.2	51(10.2)	42(10.5)	9(9)	0.7
DVT/ PE, n(%)	26(1.1)	24(1.0)	2(2)	0.3	9(1.8)	7(1.8)	2(2)	1.0
DM, n(%)	51(2.1)	48(2.0)	3(3)	0.5	9(1.8)	6(1.5)	3(3)	0.4
Other PMH, n(%)	1123(45.4)	1085(45.7)	38(38)	0.1	198(39.6)	160(40)	38(38)	0.7

IQR: interquartile range; n: number.
BMI: body mass index; PMH: past medical history; HTN: hypertension; DVT/ PE: deep vein thrombosis/ pulmonary embolism; DM: diabetes mellitus.

1185 Association of borderline glucose tolerance test results with fetal overgrowth and preeclampsia

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OBJECTIVE: Gestational diabetes (GDM) is well known to be associated with adverse obstetric outcomes. The most common method to diagnose GDM in the United States involves 2-step glucose tolerance testing. Some women will have a borderline 1-hour glucose tolerance test, which does not meet criteria to undergo follow up testing for GDM but may progress to overt hyperglycemia due to increasing insulin resistance in pregnancy and may be reflected in fetal growth. Our objective was to evaluate risk of large for gestational age (LGA) birth weight in women with borderline 1-hour glucose tolerance test results.

STUDY DESIGN: Retrospective cohort study of all singleton pregnancies at a single institution between 2013 to 2020 with 1-hour GTT results available for analysis. Patients were grouped by borderline (115-134 mg/dL) or normal GTT (< 115 mg/dL). Baseline demographics and pregnancy outcomes were compared in a univariate analysis. Logistic regression was used to generate adjusted odds ratios (aOR) and confidence intervals (CI) for association between borderline GTT and LGA birthweight.

RESULTS: There were 8,680 women included in the analysis, 2,430 (28%) had a borderline GTT. Women with a borderline GTT were found to be of older age, higher BMI and with higher rates of chronic hypertension (Table 1). Women with borderline GTT had significantly higher rates of LGA infants (aOR 1.35, CI 1.12-1.62), and higher rates of preeclampsia (aOR 1.39, CI 1.12-1.74), compared to those that had a normal GTT. Notably, they also had significantly lower rates of SGA infants (aOR 1.39, CI 1.12-1.74).

CONCLUSION: Women with a borderline GTT are at increased risk of delivering an LGA infant and developing preeclampsia. This may indicate progression to glucose intolerance or undiagnosed GDM.

Table 1 – Baseline Demographics

	Non-Borderline GTT (n=6,250)	Borderline GTT (n=2,430)	P-value
Age, y	28 (24-32)	30 (25-34)	<.001
Race/Ethnicity			<.001
Black	2615 (41.8)	794 (32.7)	
White	2,891 (46.3)	1,263 (52.0)	
Asian	8 (0.13)	4 (0.16)	
Hispanic	647 (10.4)	298 (12.3)	
Other	89 (1.4)	71 (2.9)	
Multiparous	3,719 (59.5)	1,458 (60.0)	0.657
BMI	30.1 (26.6-35.1)	31.5 (27.8-36.9)	<.001
Chronic hypertension	403 (6.5)	212 (8.7)	<.001
Preeclampsia	240 (3.8)	132 (5.4)	<0.01
Tobacco use	373 (6.0)	134 (5.5)	0.418
Cesarean Delivery	1,815 (29.0)	818 (33.7)	<.001
Birth weight, g	3229 (2890-3545)	3310 (2950-3640)	<.001
Preterm Delivery	600 (9.6)	258 (10.6)	0.154
APGAR<7 at 5 minutes	219 (3.5)	83 (3.4)	0.852
SGA	774 (12.4)	227 (9.4)	<.001
LGA	348 (5.6)	202 (8.3)	<.001

y: years, g: grams

Table 2 – Obstetric Outcomes

	Normal GTT (n=6,250)	Borderline GTT (n=2,430)
SGA	Referent	0.85 (0.72-0.99)
LGA	Referent	1.35 (1.12-1.62)
Preeclampsia	Referent	1.39 (1.12-1.74)

Adjusted for maternal age, BMI, gestational age at GTT, chronic hypertension, and race
SGA: small for gestational age, LGA: large for gestational age

1186 Incidence of Postpartum Depression (PPD) in the COVID-19 Pandemic: Phase II Study

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OBJECTIVE: To determine the effects of SARS-CoV-2 (with/without maternal−neonatal separation at birth) on the incidence of PPD.

STUDY DESIGN: A retrospective cohort study evaluated all patients >18 years admitted to L&D between March 18th & Dec 31st 2020. Participants were grouped based on if their delivery date was before (Mar.18th - May 15th) or after (May 16th -Dec 31st) the American Academy of Pediatrics (AAP) withdrew its recommendation of maternal-neonatal separation for SARS-CoV-2 pos patients. Groups were sub-grouped based on SARS-CoV-2 status, determined with a PCR assay (Table 1).

Patient Health Questionnaire 2 (PHQ-2) & subsequent PHQ-9 were completed by patients at the 6-week postpartum visit. Responses were examined by their obstetrician & PPD was diagnosed.

Patients were excluded if the following were not available: PCR results, age, delivery type, no show for postpartum visit, and no PHQ score.

RESULTS: When maternal-neonatal separation was recommended; the incidence of PPD was 2.4% in SARS-CoV-2 neg mothers vs. 10.3% in SARS-CoV-2 pos mothers (p=0.02). The relative risk (RR) of developing PPD in SARS-CoV-2 pos mothers who underwent separation was 3.7 with a 95% CI of 1.03-13.41 (p=0.04).

After the CDC concluded there was low risk of maternal-neonatal transmission of COVID-19 & the AAP revised its guidelines to allow for maternal-neonatal bonding; the incidence of PPD was 5.5% in SARS-CoV-2 neg mothers vs 19.4% in SARS-CoV-2 pos mothers