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Growth outcomes of marginal cord insertion stratified by distance from placental margin

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determine the frequency of depressive risk in a cohort of pregnant women and partners with pregnancies complicated by a prenatal diagnosis of a congenital anomaly.

STUDY DESIGN: Postpartum Depression Screening Scale (PDSS) and Center for Epidemiological Studies-Depression (CES-D) were used to identify significant depressive risk in a cohort of pregnant patients and their partners at a single center from December 1, 2012 through July 1, 2021. Demographics, fetal anomaly classification, and antidepressant medication (ADM) use were evaluated. Fetal diagnosis category was based on primary anomaly; multiple anomalies or known genetic syndromes were categorized as miscellaneous.

RESULTS: 5,279 women and 3,997 men completed screening. 2,612 women (49.5%) and 557 partners (14.0%) screened positive for depressive risk 2-3 weeks after receiving a confirmed diagnosis of a congenital anomaly. The rate of positive depressive risk by type of anomaly is presented in the table. In pregnant women, congenital diaphragmatic hernia was associated with highest rate of depressive risk. In male partners, a neurologic diagnosis had the highest rate of positive depressive risk. Within the maternal cohort, 25.3% (801/3,168) reported use of ADM (current or historical). Of those women with a positive screen, 35.2% (681/1935) reported current or historical use of ADM.

CONCLUSION: Rates of perinatal depressive risk approach 50% in the pregnant patient and occur in 14% of partners after diagnosis of a congenital anomaly. The risk of major depression is likely significantly higher than reported national rates of depression in pregnant patients and partners in this setting. Identifying expectant parents at risk of depression allows for integration of psychosocial support and intervention during the pregnancy. Streamlined access to psychosocial services in these complex pregnancies is an essential part of perinatal care.

Rate of positive depressive risk by type of congenital anomaly		
Diagnosis Category	Maternal positive screen, N=2,612/total screened, N=5,279 (%)	Paternal positive screen, N=557/total screened, N=3,997 (%)
Cardiac	793/1674 (47.4)	143/1258 (11.4)
Congenital Diaphragmatic Hernia	240/422 (56.9)	58/338 (17.2)
Gastrointestinal	248/509 (48.7)	48/356 (13.5)
Genitourinary	163/357 (45.7)	26/256 (10.2)
Lung Lesion	284/611 (46.5)	47/458 (10.3)
Miscellaneous	220/418 (52.6)	51/294 (17.3)
Neck Mass	52/98 (53.1)	10/73 (13.7)
Neurologic disorders	520/1009 (51.5)	151/824 (18.3)
Sacroccygeal teratoma	30/56 (53.6)	7/46 (15.2)
Complicated Twins (All types, including discordant anomalies)	61/124 (49.2)	16/94 (17.0)

365 Growth outcomes of marginal cord insertion stratified by distance from placental margin

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OBJECTIVE: To compare the rates of fetal growth restriction (FGR) and small for gestational age (SGA) birthweight for patients with the sonographic diagnosis of marginal cord insertion at 1.0 cm or less, versus 1.01 to 2.0 cm, between the placental margin and cord insertion.

STUDY DESIGN: Patients sonographically diagnosed with marginal placental cord insertion (cord insertion 2.0 cm or less from the placental margin) were identified. The distance was further classified as ≤ 1.0 cm or 1.01 to 2.0 cm. The presence or absence of FGR (estimated fetal weight less than 10%ile) and the presence or absence of SGA (birth weight less than 10%ile) were recorded.

RESULTS: Marginal cord insertion was diagnosed in 163 cases; 70 cases had a placental cord insertion distance of ≤ 1.0 cm, and 93 cases had a distance of 1.01 to 2.0 cm. All cases of marginal cord insertion had significantly higher rates of FGR (16.0%) and SGA (15.8%) than the baseline population. In the group with a placental cord insertion distance of 1.0 cm or less, the rates of FGR (18.6%) and SGA (30.0%) were also higher than the general population. In cases with a distance between 1.0 and 2.0 cm, the rate of FGR (14.0%) was not significantly different than the general population; however, there was a higher rate of SGA (22.6%).

CONCLUSION: Marginal cord insertion of ≤ 1.0 cm is a significant risk factor for FGR and SGA; when 1.01 to 2 cm, marginal cord insertion remains a significant risk factor for SGA. This calls for continued antenatal surveillance with serial growth assessments for patients with marginal cord insertion defined as placental cord insertion 2.0 cm or less from the placental margin.

Figure 1: Incidence of fetal growth restriction and small for gestational age birthweight based on placental cord insertion distance. **Bold values indicate significant p-values.**

	Number of cases with fetal growth restriction	Number of cases with small for gestational age birthweight
Marginal cord insertion (n=163)	26 (16.0%, p=0.011)	42 (25.8%, p<0.001)
≤ 1.0 cm (n=70)	13 (18.6%, p=0.017)	21 (30.0%, p<0.001)
1.01 to 2.0 cm (n=93)	13 (14.0%, p=0.201)	21 (22.6%, p<0.001)

366 Nudge intervention to transition care after hypertensive disorders of pregnancy: a randomized clinical trial

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OBJECTIVE: Scalable interventions are needed to improve preventative care for those with increased cardiovascular disease (CVD) risk identified during pregnancy. We hypothesized that a nudge (reminder message) would increase counseling by the postpartum visit (PPV) provider on transitions of care and CVD risk after pregnancy.

STUDY DESIGN: Single center randomized trial (NCT04660032) including all women ≥ 18 years with a hypertensive disorder of pregnancy (HDP) enrolled in our postpartum blood pressure monitoring program, Heart Safe Motherhood, and with a PPV 4-12 weeks after delivery. Women were randomized 1:1 to usual care versus a nudge. The nudge was sent to the provider through the electronic medical record (EMR) a week prior to the scheduled PPV. The nudge included counseling phrases and patient-specific information on HDP, gestational diabetes, and primary care provider. The same phrases were available through the EMR phrase manager for

