

Characterization of Intrauterine Growth Restriction in Pregnant Women Hospital Gynecology and Obstetrics America Arias Havana, Cuba 2022

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Abstract:

Intrauterine growth restriction (IUGR) is a pathology of multifactorial causes and complex management for the obstetrician. For a fetus, not reaching its growth potential represents a significant increase in the risk of perinatal morbidity and mortality. Cases of IUGR were more frequent in patients between 20 and 34 years of age with associated pathologies such as hypertension (HTN), urinary tract infection (UTI) and preeclampsia. The most frequent route of birth was eutocic births since the caesarean sections performed were mostly by previous caesarean sections. Of a total of 1656 births in 2022, 88 were CIUR, six early and 82 late.

Keywords: perceived stress; pregnancy; mental health; psychosocial health; west Shewa; ethiopia

Introduction

The main objective of this work is to characterize intrauterine growth restriction, for which a descriptive and cross-sectional study was carried out in pregnant women at Hospital America Areas in 2022.



As it is not possible to determine the fetal growth potential for its definition, intrauterine growth tables are used, being accepted as growth normal weight for gestational age between the 10th and 90th percentiles. In addition, clinical elements such as the measurement of uterine height and the estimation of fetal weight are used. The early diagnosis of fetuses with growth disorders is

to reduce the morbidity and mortality associated with this problem, using for this purpose at certain times interventions already established.

IUGR is indirectly associated with short-term perinatal complications such as: stillbirth, intrapartum asphyxia, hypoglycemia, hypothermia, polycythemia, seizures, coagulopathies, sepsis, hyperbilirubinemia and

prematurity [2,3]. These complications result in a significant increase in admissions to intensive care units.

In addition to its relationship with prematurity, those newborns born before 32 weeks of gestation and who have CIUR have higher incidences of complications related to prematurity, requiring ventilatory support for longer periods of time and die in greater numbers than premature infants with adequate for gestational age.

In the long term, it has an adverse impact on child development, presenting alterations in muscle tone, lower IQs than those infants with adequate weight, behavioral disorders and adaptation with repercussions in adult life [4].

Development

In the present study and according to its period of time there were 1656 deliveries, of which 88 were CIUR (6 early and 82 late), there were also 22 small for gestational age.

Table 1 describes the maternal ages of pregnant women where there was CIUR and Table 2 their classification according to the type of CIUR.

Variable	Años	Cantidad	%
Edad materna (n = 110)	≤ 19	20	18,18
	20 – 34	71	64,55
	≥ 35	19	17,27

Table 1: Age of pregnant women with CIUR.

Variable	Clasificación	Cantidad	%
Tipo de CIUR	Tipo I	87	79
	Tipo II	1	0.9
	Tipo III	0	0
	Tipo IV	0	0
	PEG	22	20

Table 2: Classification of CIUR types.

According to Table 1, the most frequent age were pregnant women between 20 and 34 years for 64.55%, with ages less than or equal to 19 there were 20 pregnant women for 18.18% and with 35 and more years 19 pregnant women for 17.27%.

According to Table 2, the predominant type of URIC was type 1 with 79.10%, since these are growth restrictions with hemodynamics normal according to the functions of the Hospital where the study was conducted and no type 3 and 4 CIUR were presented.

Table 3 shows the classification of the CIUR below the third percentile and between the third and tenth. To do this, he relates it to their fetal hemodynamics, finding a high number of CIUR below the third percentile with normal Doppler (31 cases), which suggests genetic causes, infections by TORCH, etc. Another high number is below the third percentile with altered Doppler associated with placental insufficiency in relation to maternal pathologies (22 cases).

Variable		Cantidad	%
Inferior al tercer percentil	Doppler normal	31	28
	Doppler alterado	22	20
Entre el 3er y décimo percentil	Doppler alterado	16	15
	Doppler normal	22	20
	Caída percentil único más de un 50%	19	17

Table 3: Patients according to Doppler characteristics and weight.

Table 4 shows that of the group of CIUR studied there was only one early neonatal death and two late fetal deaths related to hypertensive disease, retroplacental hematoma and placental cause.

Variable		Cantidad	%
Mortalidad neonatal		1	0,91
Mortalidad fetal	Intermedia	1	0,91
	Tardías	2	1,82

Table 4: Distribution of perinatal mortality

The following table shows that chronic arterial hypertension, preeclampsia and urinary tract infection were the most frequent pathologies for the presentation of a CIUR.

Patología	Cantidad	%
Hipertensión arterial crónica	15	13,6
Infección del Tracto Urinario (ITU)	12	10,9
Pre eclampsia	8	7,3
Diabetes pregestacional	3	2,7
HRP	2	2,7
Hipertensión arterial crónica + Pre eclampsia	2	2,7
Gemelar	2	2,7
Diabetes gestacional	2	2,7
Enfermedad del colágeno	1	0,9
Eclampsia	1	0,9
Placenta previa	1	0,9

Table 5: Patients according to associated pathologies

In this study, eutocic delivery predominated, since type 1 URICS had normal hemodynamics. Caesarean sections are mostly related to Previous cesarean section procedures, although it is not the only cause where the indications for risk of loss of well-being and restless fetal status are high (see Table 6).

Variable		Cantidad	%
Vía del parto en los CIUR	Parto eutócico	58	65,9
	Cesáreas	30	34,1
Causas de cesárea	Eclampsia	1	3,3
	HRP	2	6,7
	Placenta previa	1	3,3
	Fallo inducción	4	13,3
	Riesgo de pérdida de bienestar fetal	5	16,7
	Estado fetal intranquilizante	6	20
	Cesárea anterior	7	23,3
	Embarazo gemelar	2	6,7
	Pelviano	2	6,7

Table 6: CIUR according to route of delivery and causes

Conclusions

In the study, ICUR type 1 predominated in the results. The CIUR was not a decisive factor in the results of neonatal mortality at Hospital América Arias in the period studied. The most frequent associated pathologies were chronic arterial hypertension, urinary tract infection and preeclampsia. The most frequent route of birth was eutocic births.

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