



## Study of Age in Normal and Intrauterine Growth Retardation(IUGR) Pregnancies

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### ABSTRACT

**Background and Purpose:** The purpose of the study is to compare the age in normal and IUGR pregnancies, **Material and Methods-** Research study, Department of Anatomy, R.N.T. Medical College, Udaipur. 100 control and 100 IUGR Pregnancies, **Result-** In normal Pregnancies maximum 38 females were of more than 30 years old but in IUGR cases 34 females were between 21 to 25 years age and 34 female were more than 30 years old, **Conclusion-** In our study age is not statistically significant factor causing IUGR

**Conclusion:** **Keyword:** Pregnancy, Intrauterine Growth Retardation.

The most important cause of neonatal loss is the low birth weight. A low birth weight baby is defined by the ninth revision of International Classification of Diseases of World Health Organization(1977) as one whose birth weight is 2500 g or less, irrespective of gestational age. After correlating both birth weight and gestational age they are classified into two groups: pre-term and intrauterine growth retardation(IUGR) or small-for-date(SFD).

There are numerous causes of IUGR which are not caused primarily by placental insufficiency, but indirectly lead to it. The causes of IUGR can be subdivided into fetal and maternal etiologies. The fetal etiologies consist of genetic diseases, congenital malformations, infections, multiple gestations, and placental/cord abnormalities. The maternal etiologies are categorized as follows: (1) decreased uteroplacental blood flow, (2) reduced blood volume, (3) decreased oxygen carrying capacity, (4) nutrition status, (5) teratogens, and (6) miscellaneous causes such as short interpregnancy intervals, race, maternal age, and low socioeconomic status.

Ilker Gunyeli et al (2011)<sup>3</sup> indicated that a relationship exists between morphological changes in the placentas of IUGR and intrauterine fetal deaths.

### I. INTRODUCTION

Normal fetal growth is a critical component of a healthy pregnancy and influences the long-term health of the offspring. However, defining normal and abnormal fetal growth has been a long-standing challenge in clinical practice and research

In developed countries, the overall incidence of intrauterine growth restriction is about 2 – 8%. The incidence in developing countries is still higher. Five percent of the term and 15% of post term babies are IUGR. There are two types of IUGR: symmetrical (20%) and asymmetrical (80%).<sup>1</sup>

The concept of "placental insufficiency" appears to offer a plausible explanation for foetal emergency situations; in reality, however, it leads to unproven and possibly wrong ideas on the genesis of these phenomena.

The expressions allow and induce further deliberations and studies on actual causes of chronic or acute deficient supply of the foetus, the nascent and newborn infant, and how to avoid these causes.

Intrauterine growth restriction (IUGR), often associated with functional placental insufficiency, results in increased perinatal mortality and morbidity. Wulf<sup>2</sup>

### II. MATERIAL AND METHOD

The study of Age in normal and Intrauterine Growth Retardation cases was carried out at R.N.T. Medical College & Hospital, Udaipur, two hundred women admitted and delivered in Mahila Chikitsalaya attached to R.N.T. Medical College, Udaipur. Cases taken were those admitted to the labour rooms of the hospital (either directly or through the antenatal wards). The cases were selectively studied from 1-7-13 to 1-4-14. All the cases were within the age group of 18-40 years, of average height and weight and includes both primigravida and multigravida. All the cases were free from any other systemic disease.



Group 1-Normal Pregnancy  
100 patients included in this group, had a haemoglobin above 9 gms% and a normal urine analysis, not associated with any disease.

Group 2-IUGR Cases  
100 cases of Idiopathic IUGR were included.

**NORMAL PRAGNANCIES:**

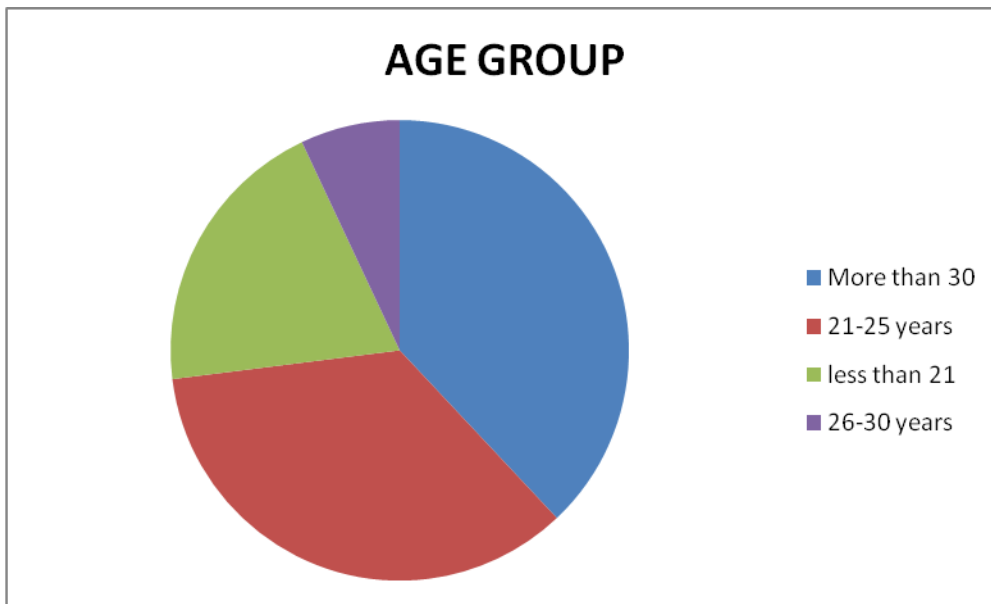
**AGE**

Total No. of normal cases studied 100. Age Distribution: Patients of different age groups ranging from minimum of 18 years to a maximum of 40 years were included in the normal group. Maximum number of patients were above the age of 30 years

**III. OBSERVATION**

**TABLE NO.1.1**

AGE GROUP	NO.OF PATIENTS
Less than 21 years	20
21-25 years	35
26-30 years	7
More than 30 years	38



**IUGR PRAGNANCIES -**

Total number of cases studied were 100 .

**AGE**

**TABLE NO.1.2**

AGE GROUP	NO.OF PATIENTS
Less than 21 years	21
21-25 years	34
26-30 years	11
More than 30 years	34

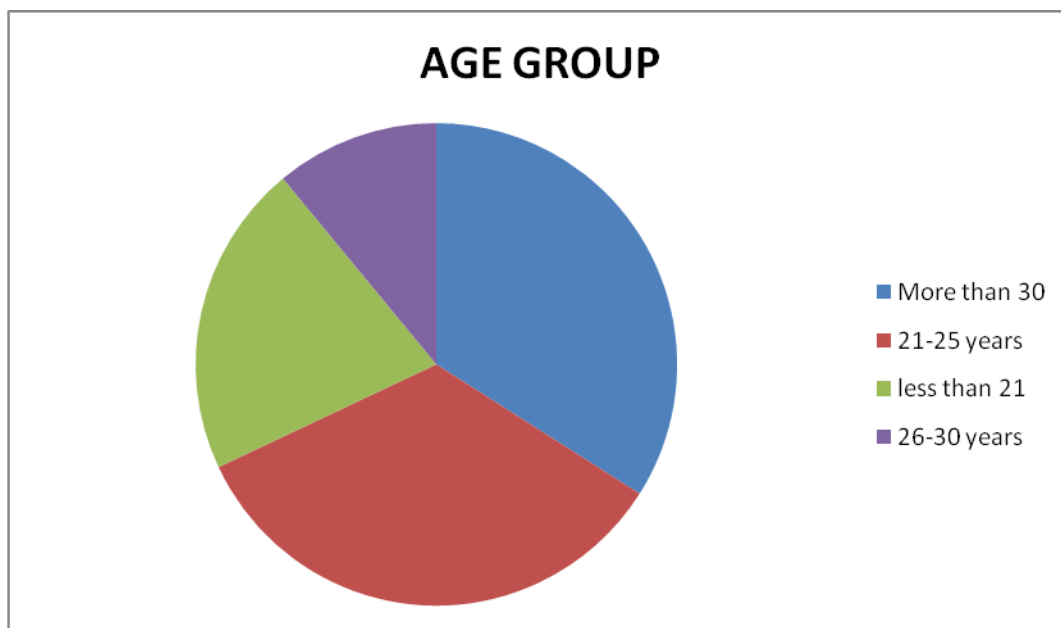


TABLE NO. 1.3  
STATISTICAL ANALYSIS OF SIGNIFICANCE

Variable	Normal pregnancies group (n = 100)		IUGR pregnancies group (n = 100)		p value
	Mean	±SD	Mean	±SD	
Age	26.86	6.39	26.49	6.35	>0.05

#### IV. DISCUSSION

Jaya DS et al reported that the prevalence of low birth weight (LBW) was high (22.0%) among the mothers aged between 15 and 19 years. There was a significant difference ( $p < 0.001$ ) in the mean birth weight (BW) of term male and female babies but there was no significant differences in their cord length. The mean placental weight of LBW term and preterm babies was less than that of the corresponding normal weight babies.

Hendrix N<sup>5</sup> said that causes of IUGR can be subdivided into fetal and maternal etiologies. The maternal etiologies are categorized as maternal age, and low socioeconomic status. Knowledge of the etiologies of fetal growth restriction is essential, so that future care can be targeted at prevention. There are several primary and secondary prevention strategies that can be adopted. In our study maximum 38 females were of more than 30 years old in normal Pregnancies but in IUGR cases 34 females were between 21 to 25 years age and 34 more than 30 years old

#### V. CONCLUSION

In our study age is not statistically significant factor causing IUGR

#### REFERENCES

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