

## **AIMS AND OBJECTIVES**

To compare the USG assesment of placental volume and placental bed vascularity between normal and IUGR pregnancies

## **ABSTRACT**

## **BACK GROUND AND OBJECTIVES**

Antenatal fetal surveillance identifies fetuses at risk of IUGR to closely monitor them to prevent perinatal morbidity and mortality & its long term consequences. This study aimed to compare placental volume, placental bed vascularity by U.S.G. So that we can use this method to predict IUGR early.

## **METHODOLOGY**

This prospective analytical study was done at the department of obstetrics and gynaecology, Govt RSRM Lying in Hospital Chennai from January 2018 to September 2018 a total of 100 uncomplicated and 100 IUGR pregnant mothers were included. All patients subjected to USG examination. Placental volume placental bed vascularity measured. They were compared & followed up till delivery.

## **RESULTS:**

The Average placental Volume in normal pregnancy is 582.82cm<sup>3</sup> whereas in IUGR it was 400.91cm<sup>3</sup>. This showed statistically significant difference. The average placental volume after delivery was 403.65 cm<sup>3</sup> and 592.20cm<sup>3</sup> in IUGR and normal pregnancies respectively. This did not shows much difference that of USG measurement before delivery. The placental bed vascularity index in normal pregnancy is 30-32 where in IUGR it is 18-20. This study shows positive correlation between the severity of IUGR and placental volume placental bed vascularity index. Hence this non invasive method can be used in predicting IUGR.

## **KEY WORDS:**

IUGR: Ultrasound, placental volume placental bed vascularity index.