Summary and Conclusion

Summary :

Maternal obesity has long been considered as an obstetric risk factor, it predisposes more to diabetes mellitus, hypertension, but with less risk of anemia and with more effect on urinary tract infection and heart disease.

The aim of this work was to :-

1- Estimate the prevalence of obesity , risk factor associated with obesity .
2- Determine maternal complication, Associated with obesity .
3- Determine neonatal complication associated with obesity .

This descriptive study include three groups of women Normal (n = 100), Overweight (n = 46), Obese (n = 54)

200 women admitted for delivery at first (1^{st}) stage of labour one half of the sample in Zagazig university hospital and the other half of sample in Banha university hospital. Subjects were classified according to their weight into three groups, subjects more than or equal to 90 kgm were considered obese group and was compared with other 2 groups (normal, overweight subjects).

Data were collected from the inpatient section in obstetrical and gynaecological department at Banha university hospital and Zagazig university hospital.

Methods of data collection were interviewing, assessment of mother and fetus during evaluation of maternal and fetal outcomes during delivery,

Data collection tools utilized were interviewing questionnaire sheet, labor and delivery sheet and neonatal assessment sheet. All sheets were diagnosed by the investigator.

The results of this study were reveal the following :

- There was highly statistically significant difference between the three groups in relation to previous pregnancy complication, post natal complication, the previous post natal complication, presence of urine glucose, presence urine albumin , the number of perinatal deaths, the condition of the fetus , 4^{th} stage complication , perineal condition, past medical history, the occupation, the number of gravida , the obstructed labour , the condition of membrane, number of obortion, the type of lie, and education ($p< 0.001$).

- There was statistically significant difference between three groups in relation to the duration of first stage of labor, duration of rupture membranes, the duration of second stage labor, the total duration of labour , measuring pulse, measuring the blood pressure of the three groups, pre-pregnancy weight of the three groups, the mode of delivery, their present weight, head circumference of the newborn, placental weight, and weight gain , ($p=<0.05$) .

- There was no statistically significant difference between three groups in relation to the weight of the fetus , apgar score for one minute, apgar score for 5 minutes, the type of fetal complication, age, number of para , chest circumference, placental condition, the number of the still birth, the outcome of still birth, measuring height of the sample, the percent of Hb for the three groups, the type of presentation, the type of position. The condition of newborn , length of the newborn . and RH type ($p=>0.05$).

CONCLUSION

Within the scope of this study, some important facts could be concluded from the result :

(1) That there was a relationship between obesity, maternal and fetal outcomes .

(2) Obesity seems not to be a function of age, accupation , parity and obesity does not relate to educational level .

(3) The results emphasized that, the obese pregnant women are liable to medical and obstetrical complication such as increased incidence of essential hypertension , gestational diabetes, anemia, urinary tract infections, premature rupture of membrane, prolonged second and third stage of labor and increased rate of caesarean section .

(4) The obese women have higher mean hemoglobin concentration. In this study, there is presence relation between the obesity, malpresentation and duration of labour. The obese women do not seem to be in a greater need for induction of labour. They also show a higher need of primary caesarean section. Primary atonic post-partum haemorrhage, blood transfusion, and maternal laceration for those delivered vaginally related to the obesity of mothers.

(5) Although one minute normal Apgar score is observed in neonate of obese parturient, yet five minute apgar score and still birth rate are similar to those of non obese mother.

(6) Maternal obesity seems to be one of the factors responsible for increasing the infants birth weight. There was increased incidence of macrosomic babies delivered by the obese women more than that delivered by the non obese ones.

(7) Thus it appears that the obese patient requires every careful antepartum care to detect and to deal with antepartum complications. Obviously, there is no treatment of obesity in the

antepartum period as the obese patients gain less weight on the average during their pregnancy, Ultrasound assessment of fetal size at 30 to 38 weeks should be done to identify large – fore – date infants. It also appears that careful intrapartum management and intensive perinatal care of women with medical complication of pregnancy may also have contributed to the favorable outcome of infants in this study .

(8) Also, the results of this study showed that the newborn infants of obese mothers are liable to macrosomic baby, as well as large for gestational age .