



AN OBSERVATIONAL STUDY TO EVALUATE BIOPHYSICAL PROFILE BY ULTRASONOGRAPHY.

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ABSTRACT:

Background- Maternal perception of fetal movements is one of the 1st signs of fetal life & is regarded as a manifestation of fetal well being.

Methods- An observational study was conducted at Department of Radiodiagnosis ; S.P.Medical College And Associate Groups Of PBM Hospitals,Bikaner.

Results-53% of the baby had evidence of fetal growth retardation,13% of baby had APGAR score less than 7,25% baby had abnormal cord.

Conclusion -The foremost need in a pregnant woman complaining of reduced fetal movement is to exclude a fetal demise.

Keywords- Biophysical Profile Score, Caesarean Section, Fetal Growth Retardation.

INTRODUCTION:

Maternal perception of fetal movements is one of the 1st signs of fetal life & is regarded as a manifestation of fetal well being. Movements are first perceived by the mother b/w 18&20 wks of gestation & rapidly acquire a regular pattern. Fetal movements have been defined as any discrete kick, flutter, swish or roll. A significant reduction or sudden alteration in fetal movements is a potentially important clinical sign. It has been suggested that reduced or absent fetal movements may be a warning sign of impending fetal death. Fetal movements tend to plateau at 32 wks of gestation. There is no reduction in the frequency of fetal movements in the late third trimester.

Type of fetal movements may change as pregnancy advances in the 3rd trimester. By form, the average number of generalized movements

per hours is 31 (range 16-45). Changes in the number& nature of fetal movements, as the fetus matures, are considered to be a reflection of the normal neurological development of the fetus. Fetal movements are usually absent during fetal sleep cycles, which occurs regularly throughout the day and night & usually last for 20-40 minutes. These sleep cycles rarely exceed 90 minutes in the normal healthy fetus¹.

Material and methods

TYPE OF STUDY: An observational study.

PLACE OF STUDY: Department of Radiodiagnosis ; S.P.Medical College And Associate Groups Of PBM Hospitals,Bikaner.

STUDY UNIVERSE: Pregnant women referred to department of Radio diagnosis; S.P.Medical College And Associate Group Of Hospitals, Bikaner.

INCLUSION CRITERIA:

- Age :18-40 year
- Live singleton pregnancy of ≥ 32 weeks of gestation.
- Women with decreased fetal movements.
- Women giving written consent .

EXCLUSION CRITERIA:

- Women in labor.
- Women with normal fetal movements.
- Women with intra-uterine fetal death.

Results

Mean birth weight was observe 2316.90 \pm 431.51 gms.

Table 1: mode of delivery

Mode of delivery	Frequency	Percentage
Normal vaginal delivery	66	66.00
Caesarian sectional	34	34.00
Total	100	100.00

66.00% delivery was normal and 34.00%delivery by caesarian section.

Table 2: fetal outcome

fetal outcome	Frequency	Percentage
Low birth weight	57	57.00
APGAR score less than 7	13	13.00
Abnormal cord	25	25

53% of the baby had evidence of fetal growth retardation,13% of baby had APGAR score less than 7,25% baby had abnormal cord.

Discussion

Maternal perception of fetal movements is a very subjective phenomenon. Ever since Sadovsky et al (1973) reported seven cases reports of pregnancies with decreased fetal

activity that preceded fetal death, there has been utilization of various methods to quantify fetal movement that could prognosticate fetal well being or need for intervention.²

To date there are no robust epidemiological studies which serve this purpose, neither are there studies to determine whether intervention (e.g. delivery or further investigation) alters perinatal morbidity or mortality in women presenting with recurrent RFM³.

Hence, as clinicians it is important to give heed to the mother’s complaint of reduced fetal movement and keep her pregnancy under observation, similar opinion has been shared by few authors.⁴ It was also astonishing to find 50% of the neonates had a birth weight below 2500 grams. 2 babies had birth weight below 1500 grams and were born to mothers who had severe pre- eclampsia and on treatment.

Conclusion

The foremost need in a pregnant woman complaining of reduced fetal movement is to exclude a fetal demise.

References

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