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TYPES OF FETAL ANOMALIES NOTED IN SECOND TRIMESTER OF PREGNANCY BY ULTRASOUND.

Radiodiagnosis

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ABSTRACT

Birth defects are a common occurrence in human development. The aim is to study the types of fetal anomalies noted in second trimester of pregnancy by ultrasound. This study used data evaluating types of fetal anomalies noted in second trimester of pregnancy among 34 Patients which were diagnosed at the radiology department of Dhiraj general hospital piparia, waghodia. Out of the 34 patients, with detected anomalies, CNS was involved in 12 patients (35%). Genito-Urinary tract was involved in 10 patients (29%) and gastrointestinal tract in 4 patients (12%) were also observed during the study. compulsory dedicated anomaly scan should become a routine practice in every pregnant woman regardless of any risk factor or presenting complaint as more fetal anomalies are detected antenatal scan and thereby saving the life of the fetus.

KEYWORDS

fetal anomalies, 2nd trimester of the pregnancy, antenatal scan , ultrasound.

INTRODUCTION:

Birth defects are a common occurrence in human development. An approximate of 1 in 33 infants is affected by congenital anomalies and result in approximately one million birth defect-related disabilities every year[1]Since the old days of introduction of ultrasound, technology has gone a long way ahead and has improved greatly. Detection of anomalies is possible from as early as 12 to 14 weeks with targeted scanning[2]. However, the 18-20 weeks scan remains the final diagnostic standard scan, at which majority of the fetal anomalies may be detected with certainty. As Ultrasonography does not have any kind of radiation hazard, it is safe for both mother and the child[3]. Since routine ultrasonography has been introduced into antenatal care visualization of the fetus at an early stage of pregnancy has been possible and as a result detection of congenital anomalies has become easier. The ultrasound scan has been used by health professionals to assess and monitor fetal growth patterns more accurately, to diagnose multiple births and to detect fetal anomalies. The aim of the study is to study the types of fetal anomalies noted in second trimester of pregnancy by ultrasound.

AIM AND OBJECTIVE:-

The aim is to study the types of fetal anomalies noted and to detect and to assess which anomalies are more commonly detected than others in second trimester of pregnancy by ultrasound.

MATERIAL AND METHODS:-

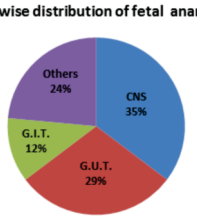
This study used data of patients presented in radiology Department in dhiraj hospital, piparia, waghodia from January 2018 to August 2019. A 34 patients were diagnosed having fetal anomalies in 2nd trimester of pregnancy using Logic V5 Ultrasound machine and using prospective and observational (non interventional) type of study.

DISCUSSION:

Table: Types Of Fetal Anomalies Noted (34 Patients)

S. No	Anomaly	Number Of Patients
1	Central Nervous System (CNS)	12
2	Genito-urinary system (GUT)	10
3	Gastro-intestitial system(GIT)	4
4	Others (Single Umblical Artery, Hydrops Fetalis, Chromosomal Abnormality, Ventricular Septal Defects, Multi System Involvement, Iud With Cystic Hygroma)	8

Chart: Types Of Fetal Anomalies Noted



Out of 34 patients, with detected anomalies, CNS was involved in 12 patients (35%). Genito-Urinary tract was involved in 10 patients (29%) and gastrointestinal tract in 4 patients (12%) were also observed during the study.

CNS anomalies were most common, found in 12 patients (35%) and among those, anencephaly was most common in 4 patients (33%) followed by hydrocephalus in 2 patients (16.6%). Genito-Urinary anomalies were seen in 10 patients (29%) among whom hydronephrosis was most common observed in 3 patients (30%) followed by unilateral renal agenesis in 2 patients (20%). Anomalies of gastrointestinal tract were observed in 4 patients and other than above system anomalies were identified in 11 patients. In others, most common were hydrops fetallis and multi system involvement found in 2 patients each (25%).

In a study conducted by Ekhlas Abid Selman al Bayati et al concluded that main types of anomalies included were hydrocephaly (36%), followed by anencephaly (31.5%), polycystic kidney disease (7%) and encephalocele(5.2%)[4].

In a Study done in Aga khan University Hospital, Karachi concluded that antenatal ultrasound were successfully diagnosed 48.8% of cases out of which 90% of cases detected with involvement of central nervous system and renal anomalies[5].

In a study conducted by Grandjean H et al, concluded that the accuracy of anomaly detected depends on the system. They observed better results are found in detection of major anomalies involving central nervous system (88.3%) and renal (84.8%) but poor results are found for heart and great vessels (38.8%)[6].

CONCLUSION:

Compulsory dedicated anomaly scan should become a routine practice in every pregnant woman regardless of any risk factor or presenting complaint as more fetal anomalies are detected antenatal scan and thereby saving the life of fetus. Some anomalies which are fatal and non-compatible with life also can be terminated after counseling the patient avoiding unwanted pain and grief.

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