

OVERDISTENDED PREGNANT UTERUS—ULTRASONOGRAPHY AS AN ANSWER TO THIS OBSTETRIC ENIGMA

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SUMMARY

Ultrasonography reveals a wide spectrum of surprises in the problem of overdistended pregnant uterus and gives an insight for a good fetal outcome and efficient obstetric management. This study shows the importance of Ultrasonography in all cases of overdistended pregnant uterus, as the incidence of congenital anomalies (10.6%) rises in this high risk group of pregnancies as compared to 0.46% i.e. 50 out of 10, 858 births during the same period in our Institute. It also shows a significant incidence of extrauterine and other causes for overdistension, unrecognised clinically but revealed by USG.

Introduction

One of the common clinical problems faced by an obstetrician is that of an overdistended pregnant uterus. When a patient whose uterus seems larger than the period of amenorrhoea presents herself at an obstetrician's office, it sets off a series of doubts as to whether it is due to wrong dates, multiple pregnancy, Hydramnios, congenital anomalies, tumours associated with pregnancy or vesicular mole.

In modern obstetric practice, the role of conventional radiology is fast getting obsolete with the advent of ultrasonography as a diagnostic aid. It gives a DEFINITE answer to this clinical enigma—Overdistended pregnant uterus. Due to the high incidence of congenital anomalies

associated with hydramnios, a study was therefore conducted on all cases of overdistended pregnant uterus, to determine the exact incidence of congenital anomalies with hydramnios in this high risk group and to highlight the need for routine USG in all cases of overdistended pregnant uterus.

Material and Methods

A prospective study over a period of 15 months was carried out in the Ultrasound Dept. of Institute of Obstet. and Gynaecology, Govt. Maternity Hospital Hyderabad. Scanning was done on 300 pregnant women whose fundal height of the uterus was more than the period of amenorrhoea by history and clinical assessment. The cases were studied by a Real-time Ultrasound with 3.5 MHZ transducer and photographs were taken in some cases. The criterion for diagnosing hydramnios was an amniotic fluid pocket with the

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largest vertical pool of liquor more than 5 cms at any period of gestation. A measurement more than 3.5 cms in the first trimester, and more than 4 cms at term were also considered as hydramnios. Follow up of all babies with congenital anomalies confirmed the ultrasound diagnosis.

Discussion

Out of the 300 cases studied (Table I) 177 cases (59%) were multiple pregnancies, out of which 176 were Twins and 1 was a case of Triplets. Thirty two cases had overdistended abdomen clinically diagnosed as overdistended uterus where extrauterine and other causes were found. The remaining 91 cases showed hydramnios, 38 of which were accountable and 53 had no associated congenital anomaly or a cause for hydramnios (Table III) in addition, 44 of the 177 cases of multiple pregnancy (Table II) had associated Hydramnios.

TABLE I

300 Cases Studied	No.	%
1. Multiple pregnancy	177	59
2. Hydramnios with assoc. Conditions (excl. Twins)	38	12.7
3. Hydramnios per se	53	17.6
4. Extrauterine and other causes	32	10.7

TABLE II

177 Cases of Multiple pregnancy	No.	%
1. Associated with hydramnios	44	28.8
2. Not assoc. with hydramnios	133	75.2

The overall incidence of hydramnios was 45% i.e. 135 of 300 cases. About 1/3,

(32.7%) of these 135 cases had Twin pregnancies and a triplet, 39.2% were cases of hydramnios per se where there was no accountable cause for hydramnios and 28.1% had a definite reason for hydramnios other than multiple pregnancy (Table III). There were 4 Cases of Diabetes and 2 Cases of Rh incompatibility causing hydramnios. Out of 32 Congenital anomalies (Table IV) detected 26 (81.25%) comprised neural tube defects. The overall incidence of congenital anomalies out of 300 cases was 10.6% (Table IV).

TABLE III

135 Cases of Hydramnios	No.	%
1. Multiple pregnancy	44	32.7
2. Hydramnios with Congenital anomalies	32	23.7
3. Hydramnios with Diabetes	4	2.9
4. Hydramnios with Rh incompatibility	2	1.5
5. Hydramnios per se	53	39.2

TABLE IV

Congenital anomalies out of 300 cases studied	No.	%
1. Anencephaly	13	4.3
2. Hydrocephalous	7	2.3
3. Encephalocele	2	0.66
4. Menonogocoele	1	0.33
5. Spina bifida	2	0.66
6. Microcephaly with encephalocoele	1	0.33
7. Fetal ascites	3	1.00
8. Achondroplasia	1	0.33
9. Diaphragmatic hernia	1	0.33
10. Hydrops Fetalis	1	0.33

The extrauterine and other causes for the uterine fundal height being more than the period of amenorrhoea are seen in (Table V).

TABLE V

300 Cases Studied	No.	%
1. Pregnancy with Fibroid uterus	3	1.00
2. Pregnancy with Ovarian tumour	7	2.3
3. Vesicular mole	12	4.00
4. Wrong Dates	10	3.3

esterase levels and Chromosomal studies to detect other anomalies.

Management of pregnancy is greatly altered depending on the Ultrasound findings—either early termination of pregnancy or fetal therapeutic procedures or mode and timing of delivery may be changed.

Conclusions

From the study, although it is obvious that the most important cause of Overdistended pregnant uterus is that of multiple pregnancy (59%), yet it points to

What becomes clear by this study is that the fetus assumes the role as patient separate from the mother with identifiable diseases and this plays a role in proper obstetric management.

TABLE VI

	In Study	Incidence at GMH
1. Congenital anomalies	10.6% (32 of 300 cases)	0.46% (50 of 10,858 births)
2. Neural tube defects	81.25% (26 of 32 Con. Anom.)	60% (30 of 50 Con. Anom.)
3. Cong. Anomalies with hydramnios	28.1%	47.1% (McCafee-Belfast)

the fact that hydramnios was associated with an obvious cause other than multiple pregnancy in 28.1% of the 135 cases with hydramnios, and the greatest need for ultrasonography is indicated by the increased incidence of Congenital anomalies (10.6%) in this 'high Risk' group of pregnancies as compared to the overall incidence of congenital anomalies (0.46%) i.e. 50 out of 10858 total births at our Institute during the period of study, 32 diagnosed by our study and 18 which came in as unbooked cases to our hospital, in labour (Table VI).

In those cases where no obvious cause for hydramnios is noted it is advocated to assess maternal AFP and Acetyl choline

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See Figs. on Art Paper II.