



**ORIGINAL RESEARCH PAPER**

**Obstetrics & Gynaecology**

**A CLINICAL STUDY OF OLIGOHYDRAMNIOS AND ITS CORRELATION WITH MATERNAL AND FETAL OUTCOME**

**KEY WORDS:** Maternal Outcome, Fetal Outcome, Oligohydramnios.

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**ABSTRACT**

**INTRODUCTION:** Oligohydramnios is diagnosed by clinical examination and transabdominal ultrasound. Risk factors associated with oligohydramnios are maternal - hypertension, uteroplacental insufficiency, idiopathic and fetal - chromosomal and structural anomalies, IUGR, spontaneous rupture of membranes, postmaturity, drugs like ACE inhibitors.

**AIMS AND OBJECTIVES :** To study the risk factors of oligohydramnios. To study the maternal and fetal outcome in women with oligohydramnios.

**MATERIALS AND METHODS:** It was a retrospective study done in Dept of OBGY at Mamata General Hospital, Khammam from 2018-2019 with sample size of 50 women.

**RESULTS:** In the present study, risk of oligohydramnios increased with maternal age. Association was more with preeclampsia- 24%. 82% of oligohydramnios were with AFI 3-5 cms. Cesarean section was done in 74%. 36% of neonates required NICU admissions.

**CONCLUSION:** Oligohydramnios is a frequent occurrence and demands intensive fetal surveillance and proper antepartum and intrapartum care.

**INTRODUCTION :**

Oligohydramnios occurs in about 1-5% of pregnancies at term. It is diagnosed by clinical examination and transabdominal ultrasound. There are several maternal and fetal risk factors associated with oligohydramnios. Maternal risk factors like - hypertension, uteroplacental insufficiency, idiopathic. Fetal risk factors like chromosomal and structural anomalies, IUGR, intrauterine infections, spontaneous rupture of membranes, postmaturity, drugs like prostaglandin inhibitors and ACE inhibitors.

**AIMS AND OBJECTIVES :**

To study the risk factors of oligohydramnios. To study the maternal outcome. To study the fetal outcome in women with oligohydramnios.

**MATERIALS AND METHODS-**

It was a retrospective study done in Department of OBGY at Mamata General Hospital, Khammam from 2018-2019 with sample size of 50 women. Demographic and other relevant data was collected from previous records and was analysed.

**INCLUSION CRITERIA-**

All antenatal women with oligohydramnios at term.

**EXCLUSION CRITERIA -**

Antenatal women >40 weeks of gestational age were excluded.

**RESULTS**

**TABLE 1: AGEWISE DISTRIBUTION**

Age group	n = 50	Percentage %
15- 20 years	8	16%
21- 25 years	12	24%
26- 30 years	30	60%
Total	50	100%

**TABLE 2: GRAVIDAWISE DISTRIBUTION**

Gravida	n=50	Percentage %
Primi gravida	20	40%
Multi gravida	30	60%
Total	50	100%

**TABLE 3: ASSOCIATED RISK FACTORS**

Risk factor	n= 50	Percentage %
Idiopathic	7	14%
Preeclampsia	12	24%

Gestational hypertension	9	18%
Anaemia	8	16%
PROM	7	14%
Thyroid abnormalities	6	12%
Twin gestation	1	2%
TOTAL	50	100%

**TABLE 4: ULTRASONOGRAPHY**

Amniotic Fluid Index (AFI)	n=50	Percentage %
3-5 cms	41	82%
<3 cms	9	18%
Total	50	100%

**TABLE 5: MODE OF DELIVERY**

Mode of delivery	n=50	Percentage %
NVD	13	26%
LSCS	37	74%
TOTAL	50	100%

**TABLE 6: TYPE OF LSCS**

Type of LSCS	n=37	Percentage %
Elective	11	30%
Emergency	26	70%
Total	37	100%

**TABLE 7: BIRTHWEIGHT OF NEWBORN**

Birth weight	n=50	Percentage %
1.5- 2 kgs	8	16%
2- 2.5 kgs	17	34%
>2.5 kgs	25	50%
Total	50	100%

**TABLE 8: NICU ADMISSIONS**

NICU Admissions	n=50	Percentage %
Yes	18	36%
No	32	64%
Total	50	100%

**TABLE 9: FETAL OUTCOME**

Fetal outcome	n=50	Percentage %
Alive	49	98%
Dead	1	2%
Total	50	100%

Risk of oligohydramnios increases with maternal age. In this study, 60% of women with oligohydramnios were multigravida in comparison with 64.5% in study done by Bhat

S<sup>1</sup>. Association of oligohydramnios was more with preeclampsia 24% as compared with 25 % in the study done by Jagatia.K<sup>2</sup>, gestational hypertension 18%, anaemia 16%. In the present study, 82% of oligohydramnios were with AFI between 3- 5 cms. Cesarean section was done in 74% of women with oligohydramnios. The LSCS was done in 47% in the study done by Bansal D<sup>3</sup>. Emergency section was done in 70.3% of women with oligohydramnios. 50% of the neonates had low birth weight <2.5 kgs. 36% of neonates required NICU admissions compared with 24 % in study by Moore IR<sup>4</sup>. 2% neonatal mortality occurred due to RDS.

**CONCLUSION:**

Oligohydramnios is a frequent occurrence and demands intensive fetal surveillance and proper antepartum and intrapartum care. Oligohydramnios is a frequent finding in pregnancy involving hypertensive disorders and anaemia. Amniotic fluid volume is predictor of fetal tolerability in labor and its decrease is associated with abnormal heart rate and meconium stained liquor. Due to intrapartum complications there is high rate of perinatal morbidity and mortality.

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