



CODEN [USA]: IAJPBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

<http://doi.org/10.5281/zenodo.3334969>

Available online at: <http://www.iajps.com>

Research Article

A RESEARCH STUDY TO ESTABLISH THE OCCURRENCE OF PERINATAL OUTCOMES AMONG FEMALES SUFFERING FROM IDIOPATHIC POLYHYDRAMNIOS

¹Madiha Abbas, ²Muhammad Akmal Zaib, ³Dr Ahmad Abdullah

¹DHQ Teaching Hospital Dera Ghazi Khan, ²Jinnah Hospital Lahore, ³DHQ Hospital DG Khan.

Article Received: May 2019

Accepted: June 2019

Published: July 2019

Abstract:

Background: Polyhydramnios is single if the ordinary appearance in pregnancy.

Objective: To establish the occurrence of perinatal outcome in a female with idiopathic Polyhydramnios.

Methodology: We carried out this research at Jinnah Hospital, Lahore in the timeframe of September 2017 to May 2018. A whole of two hundred and forty-one learning subject have Polyhydroamnios were incorporated with a singleton pregnancy. The last conclusion in this learning was perinatal result in conditions of preterm delivery, decrease Apgar achieved, and decrease delivery mass & fetal suffering. Information was examined by use SPSS.

Results: Mean Age series in this learning was from eighteen - thirty-five year with signify era of 26.6 ± 2.8 existence, signify equivalence 1.5 ± 0.73 , signify two gestational era 37.8 ± 1.3 week, denote BMI 26.7 ± 2.28 Kg/m & denote AFI was 28.4 ± 1.8 cm. the bulk of the patient was from eighteen-twenty-eight years (78.5%). The preterm release was seen in 14.6% patient. Decrease Apgar achieved was seen in 19.8% patient. Decrease delivery mass was seen in 10.5% patient. Fetal suffering was seen in 8.4% patient.

Conclusion: Idiopathic Polyhydroamnios be careful an elevated danger pregnancy, which consequences in preterm delivery decrease Apgar achieved, decreased delivery mass & fetal suffering. It ought to be managing in tertiary care location through a complete ant partum fetal safety observation include intrapartum fetal examine. Advisor neonatologist is supposed to focus on liberation.

Keywords: Idiopathic Polyhydramnios, Perinatal outcome, fetal suffering, decreased delivery mass.

Corresponding author:

Madiha Abbas,

DHQ Teaching Hospital Dera Ghazi Khan.

QR code



Please cite this article in press Madiha Abbas et al., A Research Study to Establish the Occurrence of Perinatal Outcomes among Females Suffering from Idiopathic Polyhydramnios., Indo Am. J. P. Sci, 2019; 06(05).

INTRODUCTION:

The amniotic liquid is defining as the liquid that environs the infant in the uterus. It provides the fetus, an atmosphere essential for development & growth. A figure of the motherly & fetal system interacts with every further or consequently amniotic liquid equilibrium is produced. The final level of amniotic liquid is established by the mixing of liquid run into or out [1]. Liquid equilibrium is maintained by fetal liquid manufacture (i.e. lung fluid or urine) & re-absorption (i.e. ingestion, or membranous assimilation) particularly throughout delayed development. Amniotic liquid disproportion may create a variety of confusion or malformations, which consequences in perinatal result [2]. The unfortunate Polyhydramnios comprise an Amniotic Fluid Index (AFI) of twenty-five centimetre and better or a solitary deepest pocket (SDP) of better than eight centimetres. Polyhydramnios has 3 intensity collections: mild (amniotic fluid index 25-30 centimetre or SDP of 8 – 11 centimetre), reasonable (AFI 31 – 35 centimetre) or harsh 5,6polyhydramnios (AFI>35centimeter). The occurrence of Polyhydramnios variety from 0.3% to 3.8% [3]. Several motherly disorders such as diabetes, infection, drugs, placental abnormality, or fetal abnormality, Rh iso-immunization, or numerous gestations, usually connected to Polyhydramnios. Present at birth abnormality can also show the way Polyhydramnios like intestinal Artesia of fetus leading to the gastro-intestinal obstacle, consequential with Polyhydramnios. Nevertheless, in many cases, no reason is established, or it is referred to as idiopathic and separated. Polyhydramnios can demand in several complication preterm delivery or caesarean part, intrauterine & neonatal loss. Literature show preterm delivery decreased Apgar achieve or fetal suffering in a female with idiopathic Polyhydramnios or correct monitor or organization of such circumstance in obligatory [4]. There is a scarcity of information concerning this subject in our populace. Furthermore, the consequences of worldwide study cannot be widespread on our universal inhabitants. So, there was huge requiring getting additional confirmation on this theme in our inhabitants to obtain the correct image of the perinatal outcome in a female with Polyhydramnios so that prospect examination might be intended. So, this learning was complete to decide the incidence of perinatal outcome in a female with idiopathic Polyhydramnios [5].

METHODOLOGY:

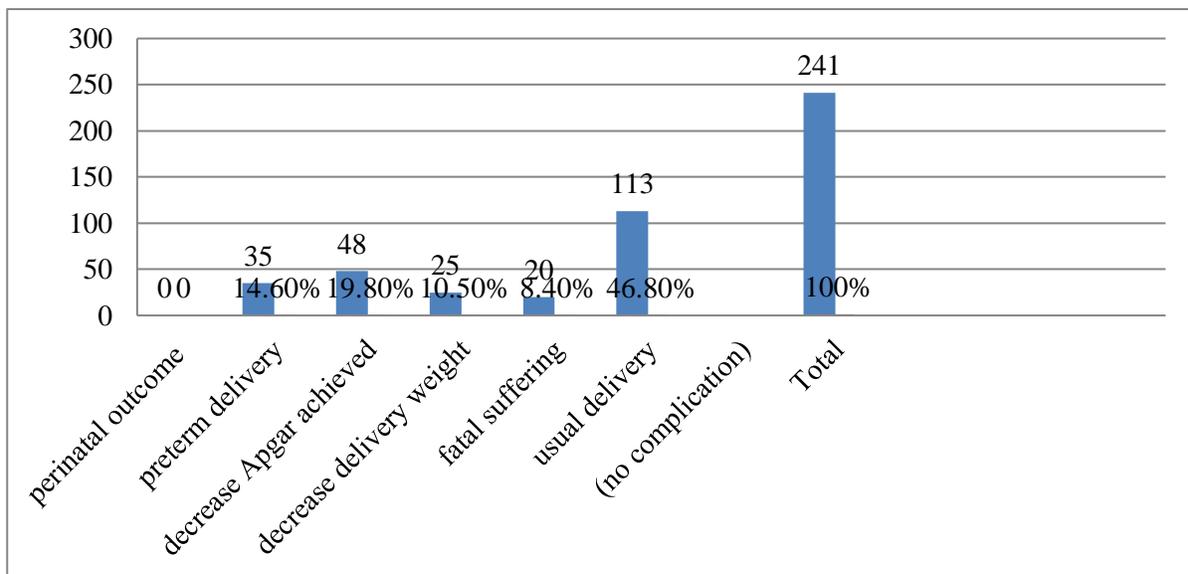
We carried out this research at Jinnah Hospital, Lahore in the timeframe of September 2017 to May 2018. A Performa was specially intended to evidence conclusion of this learning or two-hundred and forty-one pregnant females admit in Labor region, gathering the addition criterion were enrol for the learning Patients were incorporated in the learning subsequent to captivating knowledgeable approval. Baseline demographic in the sequence of the patient (age, equivalence, tallness, heaviness, BMI, amniotic fluid index) was taken. Every female was experiential through the beginning of impulsive labour, initiation of labour or intended caesarean part achieved according to the recommendation of advisor gynaecologist. The dealings (initiation of labour, Cesarean part) were complete beneath the management of advisor gynaecologist have two-year situation companionship knowledge. Information was renowned for a perinatal outcome such as preterm delivery, decrease Apgar achieved, and decrease delivery heaviness or fetal suffering as per operational meaning on particularly intended Performa. Frequencies or percentage were computed for qualitative variables like preterm delivery, decrease Apgar achieve, decrease delivery heaviness or fetal suffering. Mean± SD was obtainable for quantitative variables like age, equivalence, gestational age, amniotic fluid index or BMI. Consequence modifiers like age, equivalence, or BMI were controlled by stratification. Post-stratification chi-square analysis was practical. P assessment of $0 \leq 0.05$ was careful statistically important. SPSS was used for information investigation.

RESULTS:

Mean Age series in this learning was from eighteen - thirty-five year with signify era of 26.6 ± 2.8 existence, signify equivalence 1.5 ± 0.73 , signify two gestational eras 37.8 ± 1.3 week, denote BMI 26.7 ± 2.28 Kg/m & denote AFI was 28.4 ± 1.8 cm. the bulk of the patient was from eighteen-twenty-eight years (78.5%). The preterm release was seen in 14.6% patient. Decrease Apgar achieved was seen in 19.8% patient. Decrease delivery mass was seen in 10.5% patient. Fetal suffering was seen in 8.4% patient.

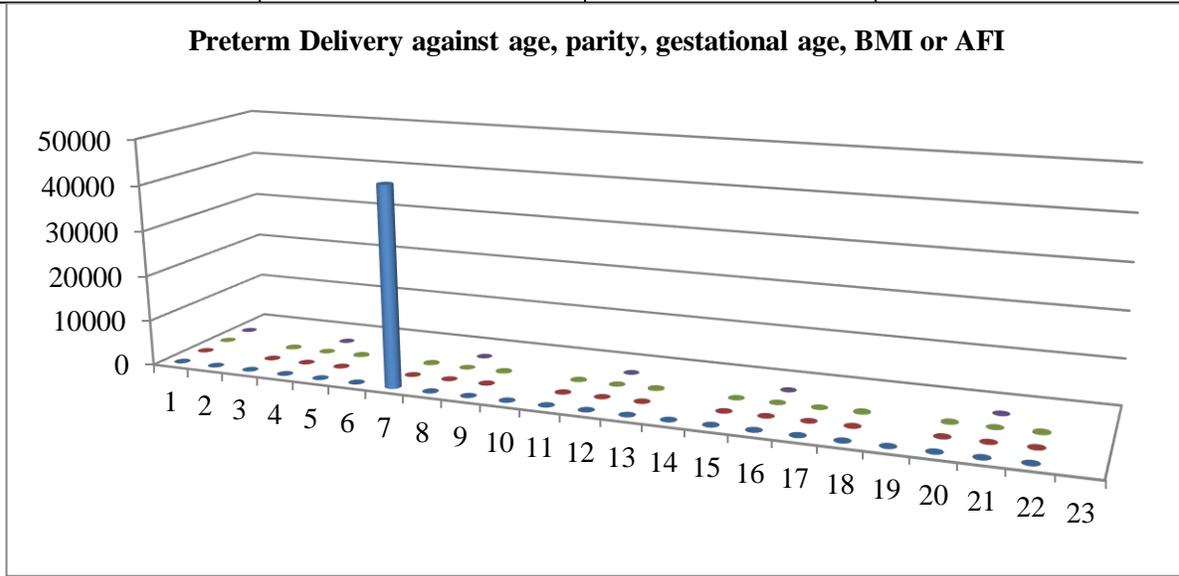
Table – I: Perinatal Outcome in Patient with Idiopathic Polyhydramnios

perinatal outcome	No. Of patient	%age
preterm delivery	35	14.60%
decrease Apgar achieved	48	19.80%
decrease delivery weight	25	10.50%
fatal suffering	20	8.40%
usual delivery	113	46.80%
(no complication)		
Total	241	100%

**Table – II:** Preterm Delivery against age, parity, gestational age, BMI or AFI

Age (in years)	no. Of patient with preterm delivery	no. Of patient without preterm, delivery	P. Value
Age (years)			
18-28	29	160	
29-35	6	46	0.487
Total	35	206	
parity			
1-2	3	186	
3-4	2	20	0.548
total	35	206	
Gestational age (in weeks)			
36-39	35	147	
39-40	0	59	0.0002

Total	35	206	
BMI (in kg/m2)			
usual	7	39	
overweight	6	46	0.900
obese	3	23	
Total	35	206	
AFI (in cm)			
26-30	35	164	
> 30	0	42	0.002
Total	35	206	



Stratification of age, equivalence, gestational age, BMI OR AFI with value to preterm delivery % decrease Apgar. Stratification of age, equivalence, gestational age, BMI and AFI with appreciated to decreased delivery mass & fetal pressure.

Table – III: APGAR gained versus dissimilar variables

Variables	no. of patient with decrease APGAR score	Column1	no. of patient without decrease APGAR achieved	P. value
Age (years)				
18-28		36	153	
29-35		12	40	0.517
Total		48	193	
Parity				
1-2		43	176	

3-4	5	17	0.778
Total	48	193	
Gestational age (in weeks)			
36-39	34	148	
39-40	14	45	0.398
Total	48	193	
BMI (in kg/m²)			
Normal	8	38	
Overweight	34	135	0.84
Obese	6	20	
Total	48	193	
AFL (in cm)			
26-30	33	166	
> 30	15	27	0.0048
Total	48	193	

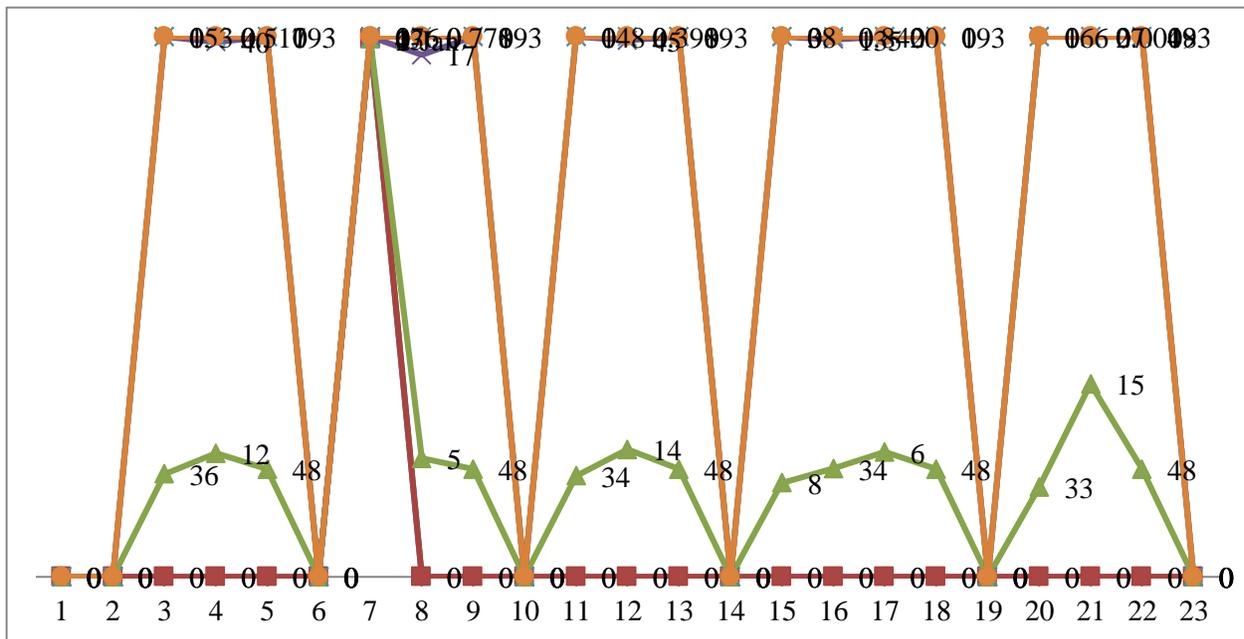


Table – IV: Decrease delivery mass versus dissimilar variables

Variables	no. of patient with decreased delivery mass	no. of patient without decreased delivery mass	P. value
-----------	---	--	----------

Age (years)			
18-28	17	172	
29-35	18	44	0.181
Total	25	216	
Parity			
1-2	22	197	
3-4	3	19	0.711
Total	25	216	
Gestational age (in weeks)			
36-39	20	162	
39-40	5	54	0.582
Total	25	216	
BMI (in kg/m²)			
Normal	4	42	
Overweight	20	149	0.422
Obese	1	25	
Total	25	216	
AFL (in cm)			
26-30	24	175	
> 30	1	41	0.009
Total	25	216	

Table – V: Fetal suffering versus dissimilar variables

Variables	no. of patient with Fetal suffering	no. of patient without fatal suffering	P. value
Age (years)			
18-28	14	175	
29-35	6	46	0.394
Total	20	221	
Parity			
1-2	16	203	
3-4	4	18	0.095
Total	20	221	
Gestational age (in weeks)			
36-39	16	166	
39-40	4	55	0.789
Total	25	221	

BMI (in kg/m²)			
Normal	6	40	
Overweight	13	156	0.347
Obese	1	25	
Total	20	221	
AFL (in cm)			
26-30	0	199	
> 30	20	22	0.0001
Total	20	221	

DISCUSSION:

Early identification of Polyhydramnios may guide to recognition of pregnancies that might be at improved danger of unfavourable outcome. A methodical assessment of patients is wanted as polyhydramnios relates to a man motherly or fetal complication. Polyhydramnios is a disorder in pregnancies & occasionally experiential because of numerous fetal disorders, nevertheless occasionally reason is not apparent [6]. Since precise aetiology of idiopathic Polyhydramnios is still not obvious, numerous studies were complete to explain the mechanism of the regulation of amniotic liquid or even to evaluate the molecular connections. There is still requiring of worldwide strategy for idiopathic Polyhydramnios in obstetric perform. In current learning, preterm delivery was experiential in 14.6% of patients. Decrease Apgar achieved was seen in 19.8% patient. Decrease delivery heaviness was seen in 10.5% of patients. Fetal suffering was seen in 8.4% of patients. The consequences of this learning, are similar to a learning where occurrence of preterm delivery was detected 16.6% versus 14.4% in present learn, decrease delivery mass 8.6% versus 10.5% in present learning, & Fetal suffering was 11.8% versus 8.2% in this learning in female with idiopathic Polyhydramnios, yet in one more study occurrence of preterm delivery was detailed a lot 8.6%, decreased Apgar gain also extremely low 5.9% & decrease delivery mass by 7.3% in female which is alike with idiopathic Polyhydramnios. A learn to compare the perinatal result of singleton pregnancies have idiopathic 10 polyhydramnios with controls. Decrease delivery mass was 35.2% vs. 3.6% in cases & controls correspondingly [7]. Decrease APGAR (<7) at five min was 21.2% vs. 0% decrease APGAR achieve was less in our learning or respiratory suffering was 32.6% vs. 100.8%. In one learn, considerably advanced rates of preterm or untimely preterm deliveries (definite as <37 & <34 week correspondingly) has been experiential in Polyhydroamnios collection compare with control. In this learning denote delivery mass was

alike beside with control while denote gestational age was range among 36 or 38 weeks. Chen et al contain also report the high occurrence of preterm deliveries (OR: 2, 4 95% CI) in their learning in full expression pregnancy or report denote the fetal delivery mass of 2929 g in Polyhydroamnios collection. The occurrence of preterm delivery was elevated in Polyhydroamnios with the denoted gestational age of 37.8 weeks or the denote mass of 3350 g as describe by Dorleijn et al. In single learn examination perinatal result in idiopathic Polyhydroamnios, it was experiential that in pregnant female have PROM, preterm labor, mal-presentations, abruption placenta or postpartum blood loss. Abele H et al, have report that ten % of cases of unsolved Polyhydroamnios had an irregularity establish behind the delivery. In a patient with preterm pregnancies, Polyhydroamnios is single of the significant variables which add to intra- or post-partum mortality. So advanced preterm delivery rates must be measured in idiopathic Polyhydroamnios cases. APGAR achieve illustrate fetal condition now of delivery or is measured as the needle of the perinatal well individual. Insufficient fetal oxygen in delivery may donate to comparatively decrease achieved as Herskovits et al have exposed distorted fetal center intellectual artery pulsatility index in idiopathic Polyhydroamnios contrast with usual AFI.

CONCLUSION:

Idiopathic Polyhydroamnios be careful an elevated danger pregnancy, which consequences in preterm delivery decrease Apgar achieved, decreased delivery mass & fetal suffering. It ought to be managing in tertiary care location through a complete ant partum fetal safety observation include intrapartum fetal examine. Advisor neonatologist is supposed to focus on liberation.

REFERENCES:

1. Zhu X, Jiang S, Hu Y, Zheng X, Zou S, Wang Y, et al. The expression of aquaporin 8 and aquaporin 9 in fetal membranes and placenta in term

- pregnancies complicated by idiopathic Polyhydramnios. *Early Hum Dev.* 2010; 86(10):657-63.
2. Asadi N, Khalili A, Zarei Z, Azimi A, Kasraeian M, Foroughinia L, Salehi A, Ravanbod HR, Davoodi S, Vafaei H. Perinatal outcome in pregnancy with Polyhydramnios in comparison with a normal pregnancy in the department of obstetrics at Shiraz University of Medical Sciences. *J Matera Fetal Neonatal Med.* 2018;31(13):1696-1702.
 3. Mazor M, Ghazi F, Mammon E, Shoham-Vardi I, Verdi H, Hershkowitz R, and Lieberman JR. Polyhydramnios is an independent risk factor for perinatal mortality and intrapartum morbidity in preterm delivery. *Euro J Obstetric Gynecology Report Biol.* 1996;70(1):41-7.
 4. Herskovits R, Furman B, Basher A, Halleck M, Shiner E, Smiling A, Mazor M. Evidence for abnormal middle cerebral artery values in patients with idiopathic hydramnios. *J Marten Fetal Med.* 2001; (6):404-8.
 5. Taskin S, Pabuccu EG, Kamas AG, Kahraman K, Kurtay G. Perinatal outcomes of idiopathic Polyhydramnios. *Interv Med Appl Sci.* 2013 Mar; 5(1):21–25.
 6. Malas NOM, Jayousi TMM, Miqdadi MF, Ma'ani WOM. Perinatal outcome in idiopathic Polyhydramnios. *Bahrain Med Bull.* 2005; 27(1):12-15.
 7. Abele H, Stars S, Hofmann M, et al. Idiopathic Polyhydramnios and postnatal abnormalities. *Fetal Deign Then.* 2012;32(4):251.