



ORIGINAL RESEARCH PAPER

Gynaecology

OLIGOHYDRAMNIOS IN PREGNANCY

KEY WORDS:

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ABSTRACT

To assess whether oligohydramnios is associated with adverse pregnancy outcome and to compare the pregnancy outcome in this study group with a control group and determine the difference in outcome between the two groups.

METHOD :

This was a prospective study done over a period of 1 year. A total of 100 patients of gestational age >37 weeks were studied of which 50 had a AFI<5 and other 50 had a AFI>5 and were allocated to the control group .There was no other maternal or fetal complications.

RESULT:

The incidence of caesarean section and IUGR was high in study group when compared to control group

CONCLUSION:

Isolated oligohydramnios in the absence of any other maternal or fetal complications is not found to adversely affect the fetal outcome.

INTRODUCTION:

A fetus is surrounded inside the uterus by amniotic fluid. The presence of amniotic fluid enables normal development of the fetal respiratory , gastrointestinal, genitourinary and musculo-skeletal system. Amniotic fluid provides a protected environment for the growing fetus, cushioning the fetus against mechanical and biological injury, supplying nutrients and facilitating growth and movement. Oligohydramnios is defined as liquor volume less than the 5th percentile of the gestational age, single deepest pocket or maximum vertical pocket of less than 2cm or AFI <5cm. Early onset of oligohydramnios has been associated with fetal congenital anomalies and poor fetal outcome.

AIMS AND OBJECTIVES:

To study the perinatal outcome in isolated Oligohydramnios.

REVIEW OF LITERATURE:

Rutherford et al used 5cm as a threshold to define oligohydramnios, a number that is less than the first percentile. Values greater than 5 cm and less than 18-20 cm are considered by most to be normal.

PROCEDURE:

All antenatal low risk patients with gestational age 37-40weeks were subjected to a routine ultrasound examination.AFI was measured using the technique described by Phelan et al.

The greatest vertical dimension of this pocket is measured at right angle to the uterine ovoid contour. A curvilinear transducer was used. By marking, the uterus was divided into four quadrants using the maternal sagittal plane vertically and an arbitrary transverse line approximately halfway between the symphysis pubis and upper edge of uterine fundus. The transducer was kept parallel to the maternal sagittal plane and perpendicular to the maternal coronal plane throughout. The deepest, unobstructed and clear pocket of amniotic fluid was visualized and the image was frozen. The ultrasound calipers were manipulated in such a way to measure the pocket in a strictly vertical direction. The process was repeated in each of the four quadrants and pocket measurements were summed up to give the AFI. Patients were then grouped according to their AFI. Fifty patients with AFI> 5 were allocated to the study group and 50 patients with AFI>5 were taken as controls. On admission, non stress test (NST) was done for all women in both the study and control groups. If NST was non reassuring, emergency caesarean section was done. If NST was reassuring, further management was decided based on whether the patient was in labor or not. If patient was not in labor, she was induced with prostaglandin E2 (dinoprostone) gel intravaginally. A maximum of 2 doses of dinoprostone were used 6 hours apart for induction. Once the patient went into active labor, artificial rupture of membranes (ARM) was done at 4 cm dilatation and colour of

liquor was noted. Partogram was plotted to know the progress of labor. All cases were monitored by continuous electronic fetal monitoring. Oxytocin drip was started if contractions were weak. If there were late decelerations, persistent bradycardia or persistent tachycardia, the delivery was expedited by operative intervention. All newborns were attended by the paediatrician. The birth weight and apgar score at 1 and 5 minute were noted. If the apgar score was low or the baby had respiratory distress, the baby was admitted to the neonatal intensive care unit (NICU). The various outcomes recorded were NST, induced or spontaneous labour, colour of liquor, mode of delivery, apgar score, NICU admission, need for ventilatory support and perinatal deaths.

	Caesarean delivery	Non caesarean delivery
APGAR > 7 at 1 minute	10	62
APGAR <= 7 at 1 minute	8	20
	P=0.41	

	Caesarean delivery	Non Caesarean delivery
APGAR >7 at 5 minutes	16	76
APGAR <=7 at 5 minutes	2	6
	P=0.63	

CONCLUSION:

Isolated oligohydramnios in the absence of any other maternal or fetal complications is not found to adversely affect the fetal outcome.From this study we were able to decipher that the perinatal outcome in the form of APGAR score was not significantly different between both the groups. We can safely conclude that women with CPR score >1 can be allowed for vaginal delivery and it does not compromise on the perinatal outcome. It will decrease the infection rate and the monetary loss to the mother which might arise due to extended hospital stay following caesarean section.