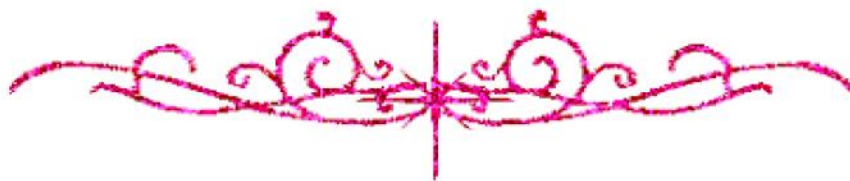


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

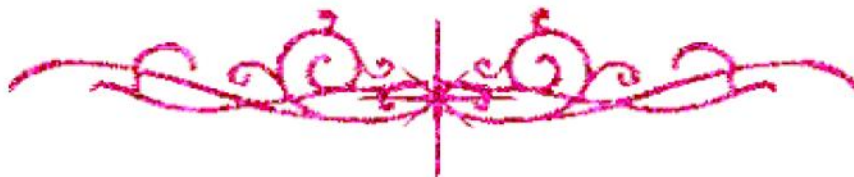
قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



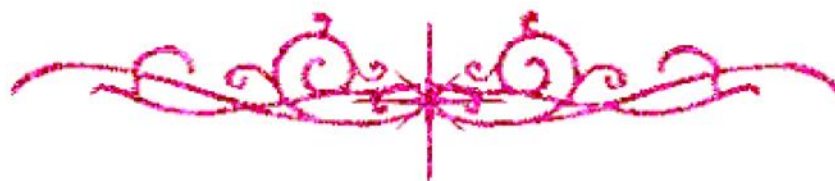


بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل



**Hydration therapy in oligohydramnios in Ain
Shams University Maternity Hospital:
Randomized Controlled Clinical Trial**

A Thesis

Submitted for partial fulfillment of Master degree in
Obstetrics & Gynecology

By

Gehad Sayed Abdel-Rahman Bakhat

*M.B.B.Ch., Faculty of Medicine - Ain Shams University (2015)
Resident of Obstetrics & Gynaecology, Ain Shams University hospitals*

Under the Supervision of

Prof. Sherif Mohammad Abdel-Hamaid

*Professor of Obstetrics & Gynecology
Faculty of Medicine - Ain Shams University*

Dr. Dina Yahia Mansour

*Assistant Professor of Obstetrics & Gynecology
Faculty of Medicine - Ain Shams University*

Faculty of Medicine
Ain Shams University
2020

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

سُبْحَانَكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

صدق الله العظيم

سورة البقرة الآية: ٣٢

Acknowledgment

*First and foremost, I feel always indebted to **ALLAH**, the Most Kind and Most Merciful.*

*I'd like to express my respectful thanks and profound gratitude to **Prof. Sherif Mohammad Abdel-Hamaid**, Professor of Obstetrics & Gynecology - Faculty of Medicine- Ain Shams University for his keen guidance, kind supervision, valuable advice and continuous encouragement, which made possible the completion of this work.*

*I am also delighted to express my deepest gratitude and thanks to **Dr. Dina Yahia Mansour**, Assistant Professor of Obstetrics & Gynecology, Faculty of Medicine, Ain Shams University, for her kind care, continuous supervision, valuable instructions, constant help and great assistance throughout this work.*

I would like to express my hearty thanks to all my family for their support till this work was completed.

Last but not least my sincere thanks and appreciation to all patients participated in this study.

Gehad Sayed Abdel-Rahman Bakhat

List of Contents

Title	Page No.
List of Tables	i
List of Figures	ii
List of Abbreviations.....	iii
Introduction	1
Aim of the Work.....	3
Review of Literature	
Physiology of Amniotic Fluid.....	4
Assessment of Amniotic Fluid Volume	19
Oligohydramnios	32
Hydration Therapy	57
Patients and Methods.....	60
Results	64
Discussion	74
Summary	80
Conclusion & Recommendations.....	82
References	83
Arabic Summary	

List of Tables

Table No.	Title	Page No.
Table (1):	Causes of oligohydramnios.....	38
Table (2):	Demographic characteristics among the studied groups.....	65
Table (3):	Amniotic fluid index among the studied groups.....	66
Table (4):	AFI level after treatment among the studied groups.....	68
Table (5):	Amniotic fluid index change among the studied groups.....	69
Table (6):	Oligoydramnios recurrence among among the studied groups	70
Table (7):	Fetal complications among the studied groups.....	71
Table (8):	Mode of delivery among the studied groups.....	72
Table (9):	Neonatal complications among the studied groups.....	73

List of Abbreviations

Abb.	Full term
<i>ACOG</i>	<i>American College of Obstetrics and Gynecology</i>
<i>AF</i>	<i>Amniotic fluid</i>
<i>AFI</i>	<i>Amniotic fluid index</i>
<i>AFV</i>	<i>Amniotic fluid volume</i>
<i>FGR</i>	<i>Fetal growth restriction</i>
<i>IV</i>	<i>Intravenous</i>
<i>MGSS</i>	<i>Mean gestational sac size</i>
<i>MH</i>	<i>Maternal hydration</i>
<i>MVP</i>	<i>Maximum vertical pocket</i>
<i>PPROM</i>	<i>Preterm prelabor rupture of membranes</i>
<i>RR</i>	<i>Relative risk</i>
<i>SDP</i>	<i>Single deepest pocket</i>

List of Figures

Fig. No.	Title	Page No.
Figure (1):	Mean A.F. Volume.....	18
Figure (2):	Flow chart of the studied cases	64
Figure (3):	Amniotic fluid index among the studied groups.....	67
Figure (4):	AFI level after treatment among the studied groups	68
Figure (5):	Amniotic fluid index change among the studied groups	69
Figure (6):	Amniotic fluid index recurrence among the studied groups.....	70
Figure (7):	Fetal complications among the studied groups.....	71
Figure (8):	Mode of delivery among the studied groups.....	72
Figure (9):	Neonatal complications among the studied groups.....	73

INTRODUCTION

Amniotic fluid is surrounding the fetus allowing musculoskeletal development and protecting it from trauma. It also maintains temperature and has a minimal nutritive function. Amniotic fluid also promotes growth and differentiation of tissues of lung and gastrointestinal tract through inhalation and ingestion of Amniotic fluid respectively (*Eslaminejad and Jahangir, 2012*).

Normal amniotic fluid volume changes with gestational age. Oligohydramnios has been defined as follows: Amniotic fluid volume is less than 500 ml at 32-36 weeks of gestation or maximum vertical pocket is less than 2 cm from late mid-trimester or AFI is less than 5cm (*Lord and Bhimji, 2017*).

Normally the amniotic fluid volume increases from approximately 250 mL at 16 weeks to 1000 mL at 34 weeks then declining thereafter to approximately 800 mL at term. The amniotic fluid volume reflects the status of both the mother and the fetus and is altered in many physiological and pathological conditions (*Dubil and Magann, 2013*).

Oligohydramnios is one of the prevalent threatening conditions to fetal health. Intrauterine growth restriction, respiratory distress syndrome and chronic fetal hypoxia are associated with oligohydramnios (*Uche et al., 2018*).

Hydration can be considered an effective way of decreasing the chance of oligohydramnios because maternal dehydration increases the chance of the condition. Therefore both serum and oral hydration therapies are hypothesized to be effective treatment for oligohydramnios (**Gizzo et al., 2015**).

Previous studies have demonstrated that maternal hydration is beneficial in treating pregnancies with oligohydramnios (**Shahnazi et al., 2012**).

AIM OF THE WORK

The aim of this study is to find out if there is significant increase in amniotic fluid index after acute maternal hydration in pregnant women with oligohydramnios and to evaluate therapeutic effectiveness of two different modalities of hydration therapy.