سامية محمد مصطفى



شبكة المعلومات الحامعية

بسم الله الرحمن الرحيم



-Caro-

سامية محمد مصطفي



شبكة العلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





سامية محمد مصطفى

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسو

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



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار



سامية محمد مصطفي



شبكة المعلومات الجامعية



المسلمة عين شعور المسلمة عين شعور المسلمة عين شعور المسلمة عين شعور المسلمة ا

سامية محمد مصطفى

شبكة المعلومات الحامعية



بالرسالة صفحات لم ترد بالأصل



EFFECT OF COMPRÉSSION THERAPY VERSUS EXERCISE ON THE RELIEF OF DEPENDENT EDEMA DURING PREGNANCY

Thesis

For Partial Fulfillment of the Master Degree in Maternal and Newborn Health Nursing.

By

Azza Ali Abd El Hamid (B.Sc Nursing)

Supervised by

Dr. Shadia A. Hassan

Professor of Maternal & Newborn Health Nursing, Faculty of Nursing, Cairo University.

Dr. Khaled Rasheed Mohamed

Professor of Obstetrics & Gynecology, Faculty of Medicine, Cairo University.

Faculty of Nursing Cairo University 2001

B 141-5

I would like to express my gratitude to Dr. Hayat Emam, lecturer of Maternal and Newborn Health Nursing, Faculty of Nursing, Cairo University, for helping me to prepare the presentation.

I would like to express my gratitude to Dr. Magda Ahmed Fawaz, Lecturer of Maternal and Newborn Health Nursing, for her cooperation and encouragement.

Last but not least, deep thanks and best wishes to all my colleagues in the Maternal and Newborn Health Nursing Department faculty of Nursing, Cairo University, as they were always there when I was in need.

The Candidate

AzzaAlí

Effect of Compression Therapy versus Exercise on the Relief of Dependant Edema during pregnancy

BY

Azza Ali Abd El Hamid Abstract

Dependent leg edema is a common discomfortable condition that occurs as a result of physiological changes during pregnancy. It may predispose women to varicosities and thrombophlebitis. The nurse plays an important role in caring for women with edema during pregnancy. So, the aim of this study was to examine the effect of compression therapy either by elastic stocking or stretch bandage versus exercise on the relief of leg edema during pregnancy. Two-hundreds pregnant women recruited from the out-patient clinic at El Manial Maternity were classified into three groups, two study groups Hospital. Subjects (compression therapy,n=50 &exercise,n=50) and one control group(n=100). The compression therapy group was divided into elastic stocking group(n=25) and stretch bandage group(n=25). Data were collected through interviewing and initial and follow up assessment. Assessment of edema was done by pressure of the swollen area and measuring of leg edema circumference using measuring tape. Both of compression therapy and exercise groups showed a statistically highly significant difference in decreasing dependent edema during pregnancy (P<0.01) compared with the control group. Moreover, during follow-up measurements of the elastic stocking and stretch bandage groups showed a lower mean of leg edema circumference than exercise group. In conclusion management of leg edema either by compression therapy or exercise has an important value in relieving symptoms of leg edema during pregnancy.

Tages: Nursing master's thesis, Human.

Key words: Dependent edema, Exercise, Elastic stocking, Bandage, Pneumatic compression.

The American Psychological Association (APA) style of writing Manuscripts (1994) is adopted throughout this master's thesis.

CONTENTS

Chapter	page
I INTRODUCTION	1
-Significance of the Study	4
-Aim of the Study	4
-Hypotheses	4
-Definition of Terms	5
II REVIEW OF LITERATURE	7
-Physiological Changes During Pregnancy	7
Hemodynamic Changes	7
Uterine Changes	8
Renal Changes	9
-Weight Gain during Pregnancy	10
-Edema	12
Pathophysiology of Edema During Pregnancy	12
Types of Edema	14
*Dependent Edema	14
*Pitting Edema	15
-Management of Edema During Pregnancy	18
Management of Edema by Exercise	18
Management of Edema by Compression Therapy	24
* Elastic Stocking and Bandage	24
* Intermittent Pneumatic Compression	27
 Management of Edema by Bed Rest 	31
 Management of Edema by Immersion 	34
-Nursing Responsibilities in the Care of Women	
Experiencing Edema During Pregnancy	38

CONTENTS (cont.)

Cha	pter	page
Ш	SUBJECTS and METHODS	43
	- Design	43 ⁻
	-Sample	43
	-Setting	44
	- Tools	44
	- Procedure	45
	-Pilot Study	49
	-Statistical Methods	50
IV	RESULTS	52
V	DISCUSSION	83
VI	SUMMARY, CONCLUSION & RECOMMENDATIONS.	94
	REFERENCES	100
	APPENDICES	
	-Appendix A (Demographic sheet)	
	-Appendix B (General Examination and Follow up She	et)
	-Appendix C (Parameters of Stocking Selection)	
	-Appendix D (Therapeutic graduated compression)	
	- Appendix E (Active Range of Motion Exercise)	
	ARABIC SUMMARY	

I

ACKNOWLEDGMENT

First of all I would like to thank my **GOD** for helping me to accomplish this work.

I would like to express my endless gratitude and appreciation to all my Professors who taught me the true meaning of courage, and gave me a lot of time, knowledge, and experience.

I am deeply indebted to *Dr. Shadia Abd El Kader Hassan*, Professor of Maternal and Newborn Health Nursing, Faculty of Nursing, Cairo University, for her precious help, constant support, constructive criticism, valuable supervision for the perfection of this work. She helped me in choosing this topic for investigation.

Sincere appreciation and thanks to Professor *Dr. Khaled Rasheed*, Professor of Obstetrics and Gynecology, Faculty of Medicine, Cairo University, for his supervision, faithful guidance, generous advice and continuous encouragement in completing this work.

I would like to express my deep gratitude to my mother and my husband who paved me the way through their affection and tolerance.

Also I would like to thank mothers recruited for this study who helped me to accomplish this work.

LIST of TABLES

able	0	rage
1.	Distribution of Subjects in the Control and Study groups	
	by Age	54
2.	Distribution of Subjects in the Control and Study groups	
	by their Level of Education	55
3.	Distribution of Subjects in the Control and Study groups	
	by Occupation	56
4.	Distribution of Subjects in the Control and Study groups	
	According to the Nature of Occupation	59
5.	One-Way ANOVA for Distribution of rhe Sample by	
	Resting Hours	59
6.	One-Way ANOVA for Distribution of rhe Sample by	
	Working Hours	60
7.	Distribution of Subjects in the Control and Study groups	
	by Body Mass Index (BMI)	61
8.	Distribution of Subjects in the Control and Study groups	
	by their gravidity and Parity	63
9.	Distribution of Subjects in the Control and Study groups	
	by Gestational Age	65
10	Discriminant Analysis for Factors Affecting Onset of Eden	na
	Among the Sample	69
1	Mean Measurements of Left and Right Leg Edema	
	Circumference of the Control Group in the Initial and	
	Follow up visit	73

LIST of TABLES (cont.)

Table	Page
12.	Mean Measurements of Left and Right Leg Edema
	Circumference of the Exercise Group in the Initial and
	Follow up visit75
13.	Mean Measurements of Left and Right Leg Edema
	Circumference of the Stretch Bandage Group in the
	Initial and Follow up visit77
14.	Mean Measurements of Left and Right Leg Edema
·	Circumference of the Elastic Stocking Group in the
	Initial and Follow up visit79

LIST of FIGURES

Figure Pa	ıge
1. Effect of Gravid Uterus ov Pelvic Veins	3
2. Assessment of Pitting Edema	
3. The Physiology of Bed Rest	
4. The Physiology of Immersion	
5. Distribution of Subjects in the Control and Study Groups by	
Occupation5	7
6. Distribution of Subjects in the Control and Study Groups by	
Body Mass Index (BMI)6	1
7. Distribution of Subjects in the Control and Study Groups by	
their gravidity64	4
8. Distribution of Subjects in the Control and Study Groups by	
their Parity64	4
9. Distribution of Subjects in the Control and Study Groups by	
Gestational Age (GA)60	6
10. The Most Common Sites of Edema68	
11. Distribution of the Sample by the Onset of Edema According	
to Gestational Age69	9
12. Factors that Increase the Level of Edema7	1
13. Factors that decrease the Level of Edema	1
14. Effect of Compression Therapy vs Exercise in Relation to	
the Decrease of Ankle Edema8	0
15. Effect of Compression Therapy vs Exercise in Relation to	
the Decrease of Feet Edema8	1
16. Effect of Compression Therapy vs Exercise in Relation to	
the Decrease of Pretibial Edema	2