



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكرو فيلم



MONA MAGHRABY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

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



MONA MAGHRABY



Risk Factors for Deep Venous Thrombosis among Patients Admitted to Vascular Unit

Thesis

Submitted for partial fulfillment of Master degree
in
(Medical Surgical Nursing)

Presented By

Basem Rafat Naguib Mousa

BSc. in Nursing Science (2012)
Faculty of Nursing – Sohag University

**Faculty of Nursing
Ain Shams University
2021**



Risk Factors for Deep Venous Thrombosis among Patients Admitted to Vascular Unit

Thesis

Submitted for partial fulfillment of Master degree
in

(Medical Surgical Nursing)

Under Supervision of

Prof. Dr. Naglaa El-Sayed Mahdy

Professor of Medical Surgical Nursing
Faculty of Nursing, Ain Shams University

Dr. Sara Fathy Mahmoud

Assistant Professor of Medical
Surgical Nursing
Faculty of Nursing
Ain Shams University

Dr. Mona Gamal Mohamed

Lecturer of Medical Surgical
Nursing
Faculty of Nursing
Sohag University

**Faculty of Nursing
Ain Shams University
2021**

Acknowledgement

*First and foremost, I feel always indebted to **Allah**, the **Most Beneficent** and **Merciful** who gave me the strength to accomplish this work,*

*My deepest gratitude to my supervisor, **Prof. Dr. Naglaa El-Sayed Mahdy**, Medical Surgical Nursing, Faculty of Nursing, Ain Shams University, for her valuable guidance and expert supervision, in addition to her great deal of support and encouragement. I really have the honor to complete this work under her supervision.*

*I would like to express my great and deep appreciation and thanks to **Dr. Sara Fathy Mahmoud**, Assistant Professor of Medical Surgical Nursing, Faculty of Nursing, Ain Shams University, for her meticulous supervision, and her patience in reviewing and correcting this work,*

*I must express my deepest thanks to my **Dr. Mona Gamal Mohamed**, Lecturer of Medical Surgical Nursing, Faculty of Nursing, Sohag University, for guiding me throughout this work and for granting me much of her time. I greatly appreciate her efforts.*

*Last but not least, I would like to express my deepest and sincere thanking to **everyone** who directly and indirectly helped me to complete this work,*

*✍ **Basem Rafat Haquib Mousa***

Dedication

*I ought like to reveal my largest gratefulness and appreciations to the most important persons in my life, to my **Parents**, my **Wife**, my **Son** "Bavly" , my **Daughter** "Barthy", my **brothers** & my **sisters** dedicated them this work. While there are no any words to fulfill their right after God to me, God bless them for their:*

* Efforts,
 Encouragement,
 Cooperation,
 And Support.*

*Yours Sincerely,
Basem*

List of Contents

<i>Subject</i>	<i>Page No.</i>
List of Abbreviations.....	i
List of Tables.....	iii
List of Figures	vi
Abstract	vii
Introduction	1
Aim of the Study	6
Review of Literature	7
Subjects and Methods	59
Results.....	72
Discussion	106
Conclusions	141
Recommendation.....	143
Summary	143
References	151
Appendices	
Protocol.....	
Arabic Summary	..

List of Abbreviations

<i>Abbr.</i>	<i>Full-term</i>
ABC	: Air way, Breathing, Circulation
BMI	: Body Mass Index
CBC	: Complete Blood Count
CDT	: Catheter-Directed Thrombolysis
CT	: Computed Tomography
DVT	: Deep Vein Thrombosis
GCS	: Graduated Compression Stocking
HRT	: Hormone Replacement Therapy.
INR	: International Normalized Ratio
IPC	: Intermittent pneumatic compression
LMWH	: Low-Molecular-Weight Heparins
MR	: Magnetic Resonance
NOACs	: New Oral Anticoagulants
OCCPs	: Oral Combined Contraceptive Pills
PCD	: Phlegmasia Cerulean Dolens, literally means painful blue inflammation derived from Greek language.
PCDT	: Pharmacomechanical Catheter-Directed Thrombolysis
PE	: Pulmonary Embolism

List of Abbreviations

PMT	: Percutaneous Mechanical Thrombectomy
PT	: Prothrombin Time
PTS	: Post-Thrombotic Syndrome
PTT	: Partial Thromboplastin Time
PVS	: Peripheral Vascular System
RBS	: Random Blood Sugar
tPA	: Tissue Plasminogen Activator
TRF	: Thrombosis Risk Factor
UFH	: Unfractionated Heparin
US	: Ultrasound
VKA	: Vitamin K Antagonist
VTE	: Venous Thromboembolism

List of Tables

Table No.	Title	Page No.
Table (1):	Percentage distribution of the studied patients' regarding demographic characteristics.....	74
Table (2):	Percentage distribution of the studied patients' regarding medical diagnosis and chief complaint on admission	76
Table (3):	Percentage distribution of the studied patients' regarding Examinations for DVT Patient	77
Table (4):	Percentage distribution of the studied patients' regarding management for DVT Patient.	78
Table (5):	Percentage distribution of the studied patients' knowledge regarding meaning, Signs & symptoms for deep vein thrombosis.	79
Table (6):	Percentage distribution of the studied patients' knowledge regarding risk factors for DVT.	80
Table (7):	Percentage distribution of the studied patients' knowledge regarding treatment methods and complications for DVT.....	82
Table (8):	(A): Percentage distribution of the studied patients' knowledge regarding precautions to prevent DVT related to therapeutic drugs, nutrition and activity.	83

Table (8):	(B): Percentage distribution of the studied patients' knowledge regarding precautions related to daily lifestyle and periodic follow-up.....	84
Table (9):	Percentage distribution of the studied Patients' total level of knowledge regarding DVT	86
Table (10):	Percentage distribution of the studied patients' regarding body mass index (BMI)	88
Table (11):	Percentage distribution of the studied patients' regarding their personal habits	89
Table (12):	Percentage distribution of the studied patients' regarding Activity of daily living	90
Table (13):	(A) Percentage distribution of the studied patients' regarding risk factors related to past medical history	91
Table (13):	(B) Percentage distribution of the studied patients' regarding risk factors related to past medical history.	93
Table (14):	Percentage distribution of the studied patients' regarding site of exposing to acute injury.	95
Table (15):	Percentage distribution of the studied patients' regarding risk factors related previous family and surgical history.	96
Table (16):	Percentage distribution of the studied patients regarding site and time of surgery	97

Table (17):	Relation between demographic characteristics regarding (age, Gender, educational level and nature of work) and risk factors leading to DVT .	100
Table (18):	The relation between educational level and patients' total level of knowledge	101
Table (19):	Relation between risk assessment scale with total knowledge, patients' habits and activity of daily living of the studied patients..	102
Table (20):	Relation between risk assessment scale with gender, past medical history, family history and surgical history of the studied patients.....	103
Table (21):	Relation between risk assessment scale with age and body mass index (BMI) of the studied patients.....	104

List of Figures

Figure No.	Title	Page No.
-------------------	--------------	-----------------

Figures in Review:

Figure (1):	Structure of the blood vessels	8
Figure (2):	Pathophysiology of DVT	16
Figure (3):	Lower extremity Doppler sonography with DVT	27
Figure (4):	Stent with balloon angioplasty	41
Figure (5):	Elastic compression stocking	56

Figures in Results:

Figure (1):	Patients' satisfactory level of knowledge regarding Deep Venous Thrombosis Precautions.	85
Figure (2):	Total level of knowledge among the studied patients regarding DVT meaning, signs, symptoms, risk factors, treatment, complications and precautions to prevent recurrence.	87
Figure (3):	Percentage distribution of the studied patients' regarding risk factors related to past medical history	98
Figure (4):	Percentage distribution of the studied patients' regarding total risk factors for deep vein thrombosis	99
Figure (5):	Percentage distribution of the studied patients according to Autor DVT risk assessment scale	105

Risk Factors for Deep Venous Thrombosis among Patients Admitted to Vascular Unit.

Basem R. Mousa*, Nglaa E. Mahdy, Sara F. Mahmoud***, Mona G. Mohamed******

* BSc. In Nursing Science (2013),

** Professor of Medical Surgical Nursing, Faculty of Nursing/ Ain Shams University

*** Assistant professor of Medical Surgical Nursing Faculty of Nursing Ain Shams University

**** Lecturer of Medical Surgical Nursing Faculty of Nursing Sohag University

Abstract

Background: Deep venous thrombosis (DVT) is an a major public health concern and important cause of morbidity and mortality worldwide; with an estimated annual incidence in developed countries 1 to 2 per 1,000 people each year. **The study aimed** to assess risk factors for deep venous thrombosis among patients admitted to vascular unit **Study design:** a descriptive exploratory design was be utilized. **Setting:** this study was conducted at vascular surgical unit of Sohag university hospitals. **Subjects:** A purposive sample of 75 Patients with DVT were be recruited in the study. **Tools of data collection:** (1) patient structured interview questionnaire (2) DVT risk factor assessment Tool. **Results:** More than half of the studied patients had unsatisfactory level of knowledge towards risk factors for DVT. There was a significant relation between risk assessment scale for DVT with total knowledge, patients' habits, age, gender, past medical & surgical history and body mass index of the studied patients. **Conclusion:** There were many risk factors for DVT incidence; the most common risk factors were patients' habits related factors. While family history and activity of daily living related factors were the least common risk factors. **Recommendation:** Designing educational program for patients with DVT to improve their knowledge regarding risk factors for deep vein thrombosis and its complications with submission of educational handouts, posters, and brochures.

Keywords: Deep venous thrombosis, Risk factors, Vascular unit
