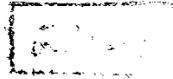


Infections in Critical Care

Essay Submitted for Partial Fulfillment
of Master Degree in Anesthesiology



617.96
H.A.

BY

Hausam El-Din Moustafa Abu Shama

M.B.B.Ch., Faculty of Medicine, Ain Shams University

50115

Supervised BY

Prof. Dr. Nabil Mohammed Abd El-Moeti

Professor of Anesthesia and Intensive Care

Faculty of Medicine - Ain Shams University

Prof. Dr. Samir Al-Ansari Mohammed

Professor of Anesthesia and Intensive Care

Faculty of Medicine - Ain Shams University



Handwritten signature and date: 4/11/98

**Faculty of Medicine
Ain Shams University**

*** 1998 ***



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا سبحانك لا علم لنا

إلا ما علمتنا إنك أنت

العليم الحكيم

صدق الله العظيم



Acknowledgment

First, thanks are all due to **Allah** for blessing this work until it has reached its end, as a part of his generous help throughout my life.

I would like to direct special thanks to **Prof. Dr. Nabil Mohammed Abd El-Moeti**, Professor of Anesthesia and Intensive Care, Faculty of Medicine, Ain Shams University, for the great support and encouragement he gave me throughout the whole work. It is a great honor to work under his guidance and supervision.

I would like to express my sincere gratitude to **Prof. Dr. Samir Al-Ansari Mohammed**, Professor of Anesthesia and Intensive Care, Faculty of Medicine, Ain Shams University, for his close supervision, continuous help, and the tremendous effort he has done in the meticulous revision of the whole work.

I am greatly honored to express my utmost thanks to **Dr. Hesham Ahmed Al-Husseini**, Assistant Professor of Anesthesia and Intensive Care, Faculty of Medicine, Ain Shams University, from whom I received faithful supervision, valuable suggestions, and continuous guidance throughout this work.

Hausam El-Din Abu Shama

List of Contents

	PAGE
Introduction	1 – 2
Chapter 1: Bacteriological Aspects.	3 – 18
Chapter 2: Infections in Victims of Trauma.	19 – 32
Chapter 3: Intravascular Device-Related Infections.	33 – 46
Chapter 4: Infections Associated with Non Vascular Devices.	47 – 60
Chapter 5: Infectious Disease Risks for Critical Care Personnel.	61 – 71
Chapter 6: Septic Shock.	72 – 87
Chapter 7: Respiratory Infections in Critical Care Units.	88 – 101
Summary	102 – 104
References	105 – 124
Arabic Summary	1 – 2

List of Tables

No.	Table	Page
Table (1):	Normal body flora.	4
Table (2):	Factors contributing to local host defense.	7
Table (3):	Major problems with the use of antimicrobial agents in the ICU setting.	13
Table (4):	Indications of SDD in intensive care.	18
Table (5):	Tetanus prophylaxis in routine wound management.	22
Table (6):	Pathogens associated with catheter-related bacteruria.	50
Table (7):	Universal precautions for prevention of blood-borne infection in the health care setting.	65
Table (8):	Management of health care workers with puncture wounds.	66
Table (9):	Immunization recommendations for hospital personnel.	71
Table (10):	The systemic inflammatory response syndrome	75
Table (11):	Multiple organ dysfunction syndrome.	76
Table (12):	Nosocomial septicemia in critically ill patients.	80
Table (13):	Antibiotic therapy for septic shock.	83
Table (14):	The Multiple Organ Dysfunction Score.	86
Table (15):	Multiple Organ Dysfunction Score and ICU mortality.	87
Table (16):	Respiratory infections in the ICU: Community-acquired.	89
Table (17):	Respiratory infections in the ICU: Hospital-acquired.	89
Table (18):	Guide for empiric therapeutic approach.	100

List of Figures

No.	Figure	Page
Figure (1):	The relationship between infection, sepsis, and the systemic inflammatory response (SIRS).	74

Introduction

