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بالرسالة صفحات
لم ترد بالأصل

بعض الوثائق
الأصلية تالفه

ANAESTHETIC CONSIDERATIONS FOR PATIENTS WITH CORONARY ARTERY DISEASE

**Essay
Submitted For Partial Fulfillment
Of The
Master Degree
In
Anaesthesia and ICU**

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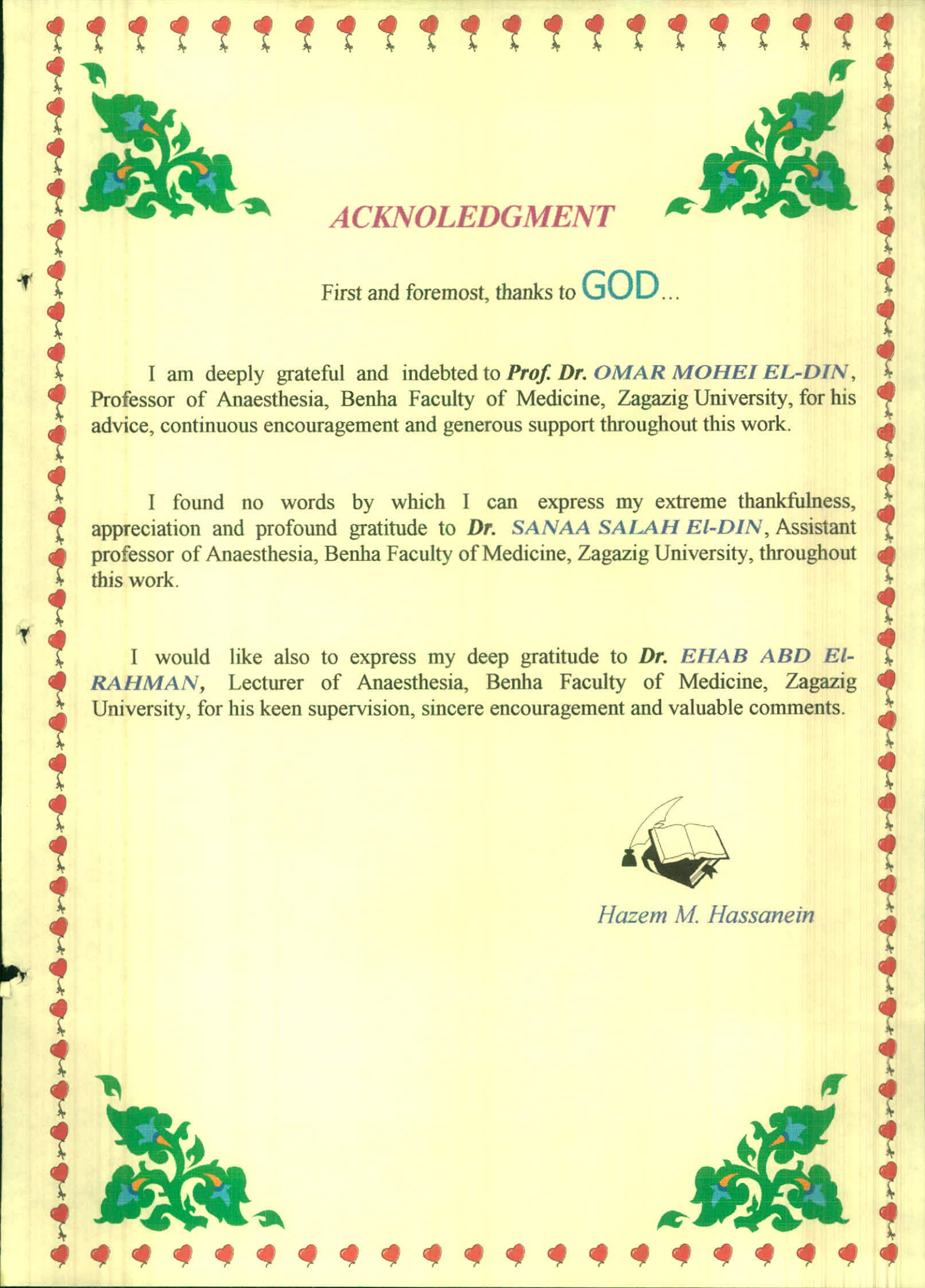
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وَ قُلْ رَبِّ زِدْنِي عِلْمًا

فَدَقَّ اللَّهُ الْعَظِيمِ



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Hazem M. Hassanein

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List of Abbreviations

ABG	:	Arterial Blood Gases
ADBP	:	Aortic Diastolic Blood Pressure
CABG	:	Coronary Artery By-pass Grafting
CAD	:	Coronary Artery Disease
CBF	:	Coronary Blood Flow
CHF	:	Congestive Heart Failure
CMLCI	:	Cardiac Myosine Light Chain I
COP	:	Cardiac OutPut
CPB	:	CardioPulmonary By-pass
CPK	:	Creatinine PhosphoKinase
CPP	:	Coronary Perfusion Pressure
CVP	:	Central Venous Pressure
EF	:	Ejection Fraction
HDL	:	High Density Lipoprotein
IHD	:	Ischaemic Heart Disease
IPPV	:	Intermittent Positive Pressure Ventilation
ISA	:	Intrinsic Sympathetic Activity
LDH	:	Lactic Dehydrogenase
LDL	:	Low Density Lipoprotein
LVEDP	:	Left Ventricular End-Diastolic Pressure
LVEDV	:	Left Ventricular End-Diastolic Volume
LVEsP	:	Left Ventricular End-Systolic Pressure
LVEsV	:	Left Ventricular End-Systolic Volume
LVIDd	:	Left Ventricular One-Dimensional diastolic (diameter)
LVIDs	:	Left Ventricular One-Dimensional systolic (diameter)
MAC	:	Minimal Alveolar Concentration
MHz	:	Mega Hertz
MI	:	Myocardial Infarction
MRI	:	Magnetic Resonance Imaging
MVO ₂	:	Myocardial Oxygen Consumption
NTG	:	Nitroglycerine
PAC	:	Pulmonary Artery Catheterization
PCWP	:	Pulmonary Capillary Wedge Pressure
POD	:	Postoperative Day
PTCA	:	Percutaneous Transluminal Coronary Angioplasty
(R/S)WMA	:	(Regional/Segmental) Wall Motion Abnormality
S ₃	:	Third Heart Sound
S ₄	:	Fourth Heart Sound
SGOT	:	Serum Glutamic Oxalacetic Transaminase
TEE	:	TransoEsophageal Echocardiography

INTRODUCTION

INTRODUCTION

The annual mortality from cardiovascular disease in general population is greater than from all other diseases combined. Similarly, the leading cause of death perioperatively is myocardial ischaemia or serious dysrhythmia(Shah et al., 1991).

The incidence of perioperative myocardial infarction with noncardiac surgery varies by the type of procedure and prevalence of coronary atherosclerosis(Ashton, 1994).

Silent myocardial ischaemia has been called the silent killer. Pain does not kill patients with coronary heart disease, but ischaemia does, whether it happens to be painful or silent(Hedma, 1994).

Preoperative evaluation of patients who might have coronary heart disease seeks to assess the patients in two ways:

-First, it is important to estimate the historical predictors which include age, previous myocardial infarction, angina, congestive heart failure, dysrhythmias, valvular heart disease and previous coronary angioplasty.

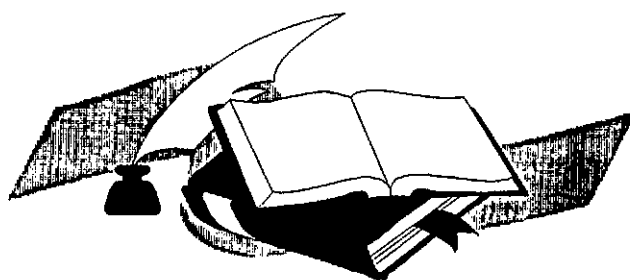
-Second, it is essential to assess the functional status of the coronary circulation using diagnostic testing predictors as twelve-lead ECG, exercise stress, radionuclear imaging, cardiac catheterization and transoesophageal echocardiography(Mangano, 1990).

Intraoperative factors also appear to affect the outcome substantially, independent of the disease status. It is recently recognised that dynamic events occurring intraoperatively may cause perioperative cardiac morbidity, including hypotension,

hypertension, tachycardia, myocardial ischaemia, ventricular dysfunction and arrhythmia(Edward et al., 1994).

The possibility of CAD should be considered in patients over 50 years old coming for surgery especially in patients with strong family history of CAD, heavy smokers, and those with elevated blood pressure, elevated serum cholesterol and elevated blood sugar level. Patients in this category as well as patients with definite disease must be fully evaluated and prepared prior to surgery. The postoperative period is the most critical. Myocardial infarction or reinfarction is more prone to occur within the first 72 hours postoperatively than is intraoperatively(Rao et al., 1983).

AIM OF THE WORK



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The aim of the work is to focus and throw light on the anaesthetic problems in patients with/at risk of ischaemic heart disease, and how to manage these problems during the perioperative period.