# ANAESTHETIC MANAGEMENT OF IMMUNOCOMPROMISED PATIENTS

*Essay*
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*In*
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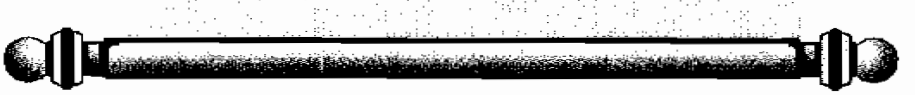

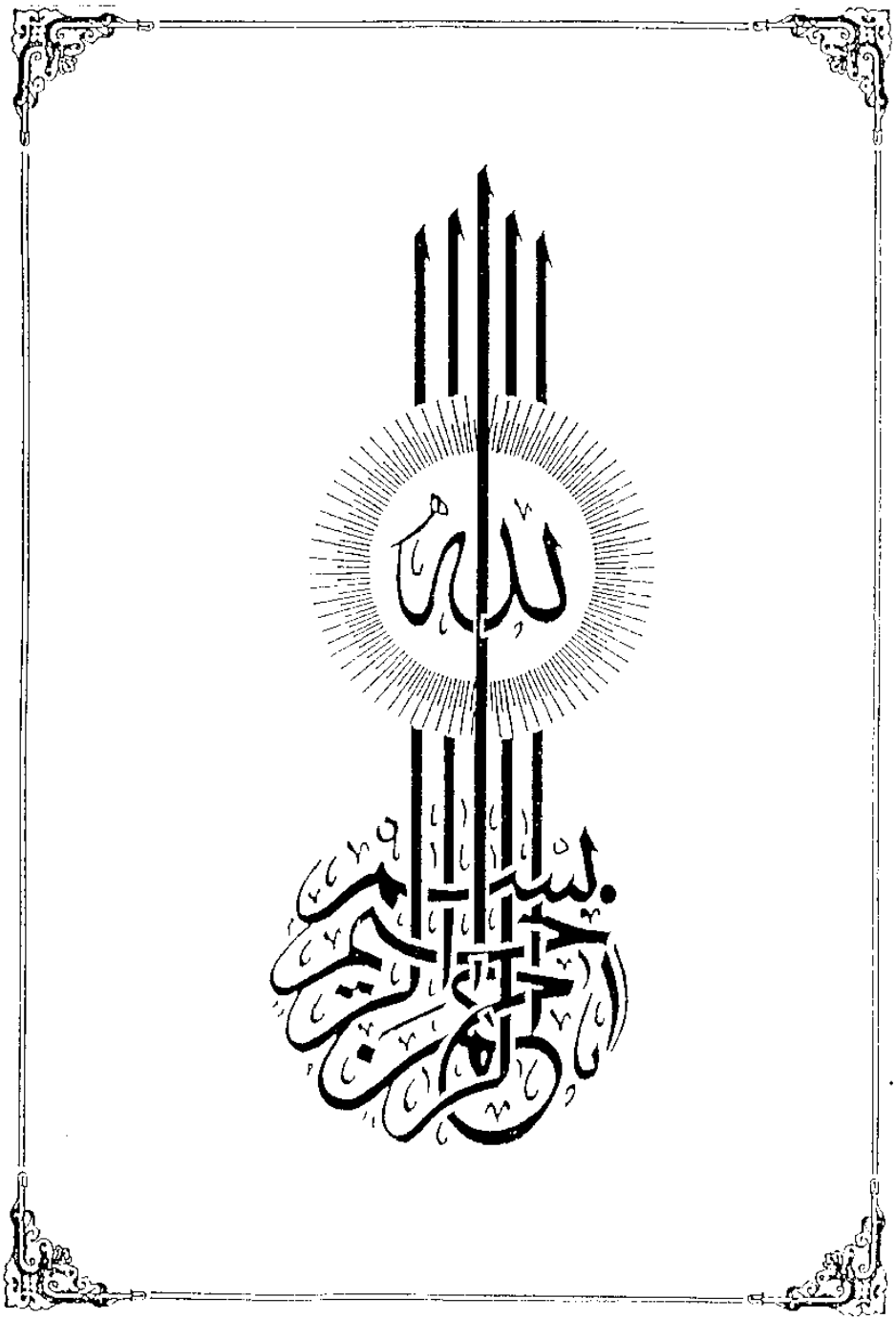

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## *List of Abbreviations*

| | |
|---|---|
| ACTH | Adrenocorticotropic hormone |
| AIDS | Acquired immunodeficiency syndrome |
| ASA | American society of anesthetist |
| B-cells | Bone marrow derived cells |
| C | Complement |
| cAMP | Cyclic adenosine monophosphate |
| CD | Cluster of differentiation |
| CDC | Centers for disease control |
| CGD | Chronic granulomatous disease |
| CMV | Cytomegalovirus |
| CVI | Common variable immunodeficiency |
| DNA | Deoxyribonucleic acid |
| EBV | Epstein Barr virus |
| ELISA | Enzyme linked immunosorent assay |
| ESRD | End stage renal disease |
| Fab | Antigen binding fragment |
| Fc | Crystallizable fraction |
| GALT | Gust-associated lymphoid tissue |
| GNAB | Gram negative aerobic bacteria |
| GVH | Graft versus host |
| HBV | Hepatitis B virus |
| HIV | Human immunodeficiency virus |
| HLA | Human leukocyte antigen |
| HPV | Human papilloma virus |
| HTLV | Human T-lymphotropic virus |
| IFNs | Interferons |
| Ig | Immunoglobulin |
| IL | Interleukin |
| IL-RA | Interluekin receptor antagonsit |
| KS | Kaposi Sarcoma |
| MAC | Membrane attack complex |
| MAC | Minimal alveolar concentration |
| MALT | Mucosa-associated lymphoid tissue |

| | |
|---|---|
| MHC | Major histocomabitibility complex |
| MIF | Migration inhibitory factor |
| NADPH | Reduced form of nicotinamide adenine dinucleotide |
| NHL | Non-Hodgkin's lymphoma |
| NK cells | Natural killer cells |
| PGL | Persistent generalized lymphadenopathy |
| PMNL | Polymorphonuclear leukocytes |
| RNA | Ribonucleic acid |
| SCF | Stem cell factor |
| SCID | Severe combined immunodeficiency |
| T-cells | Thymus dependent cells |
| TLI | Total lymphoid irradiation |
| TNF | Tumor necrosis factor |
| TNF-BP | Tumor necrosis factor binding protein |
| TPN | Total parenteral nutrition |

# INTRODUCTION

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The human body has the ability to resist almost all types of organisms or toxins that tend to damage the tissues and organs. This capacity is called "immunity" ***(Guyton, 1996).***

Basically, the immune response to anaesthesia and surgery is a beneficial reaction, needed in local defense and wound healing, and in preventing the body from making autoantibodies against its own tissues ***(Salo, 1992).*** This depression of the immune defenses has been suggested to increase the risk of post-operative infection and contribute to the dissemination of solid turnovers ***(Tonnessen and Wahlgreen, 1988).***

Compromised host is a term used to describe patients who have an increased risk for infections, and complications as a consequence of congenital or acquired, qualitative or quantitative abnormality of one or more component(s) of the host defense matrix ***(Pizzo, 1992).***

It is well known that immunocompromised patients are readily predisposed to infection which is one of the leading causes of death in the patients ***(Levine et al., 1972).***

So that, the most important points in the anaesthetic management in addition to the specific management for each type of patients, is the prevention of infection through: a)preoperative blood screening, b)prophylaxis against perioperative infections, and c)hygienic practice in anaesthesia ***(Knight and Tait, 1995)***.

# AIM OF THE STUDY