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BASIC PATHOLOGY

Mrs. T. Subha

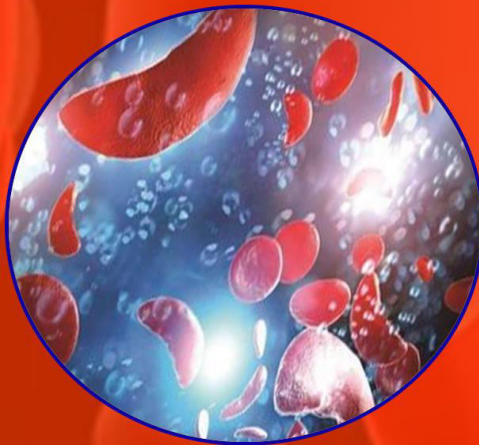
Dr. S. Subburayalu

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First Edition

Excellent Publishers

Basic Pathology

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PREFACE

Basic pathology covers the mechanism of injury to cells and tissues, as well as the body's means of responding to and repairing injury. It also explains basic mechanism of disease and it is the bridge connecting science and medicine. This book is a brief introduction of the topics including cell injury, inflammation, healing, genetic diseases, immunopathology, metabolic diseases, infectious diseases. The above concepts are explained in simple sense and we hope this book will energetically provide accurate understanding for basic readers. We thank each and every one for helping us to provide a good platform for the successful completion of this book in a timely manner. Also we invite suggestions from the reading community to improve this book in the fore coming edition.

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BASIC PATHOLOGY

UNIT I

Cell injury and Cellular adaptations

Introduction of pathology. Cell injury - types, etiology, morphology. Cell death - autolysis, necrosis, and apoptosis. Cellular adaptations-atrophy, hypertrophy, hyperplasia, metaplasia. Inflammation-Introduction, Acute inflammation-(vascular events, cellular events, chemical mediators). chronic inflammation-general features,classification. granulomatous inflammation- tuberculosis. Healing and repair - Definition, different phases of healing, wound healing, fracture healing.

UNIT II

Haematological Disorders

Anaemia - introduction and classification. Iron deficiency anemia , Megaloblastic anemia, haemolytic anemias. WBC disorders - quantitative disorders, leukemia - acute leukemias and chronic leukemias. Bleeding disorders – introduction and classification, physiology of hemostasis. thrombocytopenia, DIC, Pancytopenia.

UNIT- III

Basic Hematological Techniques

Characteristics of good technician, Blood collection - methods (capillary blood, venipuncture, arterial puncture). Definition of blood , serum and plasma ,Summary of blood ,anticoagulants, transport of the specimen, preservation, effects of storage. complete hemogram – Complete blood count, Erythrocyte sedimentation rate. Bleeding time, Clotting time, Prothrombin time, Activated partial thromboplastin time

UNIT IV

Transfusion Medicine

Selection of donor, blood grouping, Rh typing, cross matching, storage, Blood transfusion. Blood Component and its indications in transfusion. Collection, Transport, Preservation of Various clinical Specimens. Transfusion transmitted diseases, Hospital and Laboratory Waste management,

UNIT V

Clinical Pathology

Introduction to clinical pathology - Urinalysis – Physical examination; Chemical examination (heat and acetic acid test, sulfosalicylic acid method, Benedicts test, Rotheras test, fouchet's method, hays method, benzidine test, bence jones protein) Microscopic Examination. Examination of cerebrospinal fluid. Examination of body fluids - pleural, pericardial and peritoneal fluids examination. sputum examination.

First Edition

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