

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

M.D.

(GENERAL MEDICINE)

1. INTRODUCTION TO CLINICAL MEDICINE:

The practice of Medicine, Decision Making in Clinical Medicine, Principles of Clinical Pharmacology, Screening and Prevention of Disease, Women's health, Medical Disorders During Pregnancy, Medical Evaluation of the Surgical Patient, Geriatric Medicine, Palliative and End of life care, Complementary and alternative medicine, Legal issues in medicine, sports medicine, travel medicine..

2. GENETICS AND DISEASE

Principles of Human Genetics, Chromosome Disorders, The practice of Generics in Clinical Medicine, Gene therapy, Stem Cell and Gene Transfer in Clinical Medicine.,

3. NUTRITION

Nutritional Requirements Dietary Assessment, Vitamin and Trace Mineral Deficiency and Excess, Malnutrition and Nutritional Assessment, Enteral and Parenteral Nutrition Therapy, Obesity, Eating Disorders, Food borne Toxic Diseases, Free radicals and Antioxidants.

4. ONCOLOGY

Approach to the patient with cancer, Prevention and Early Detection of Cancer, Cancer Genetics, Cancer Cell Biology and Angiogenesis, Principles of Cancer Treatment : Surgery, Chemotherapy, and Biologic Therapy, Principles of Radiation Therapy, Infections in Patients with Cancer, Cancer of the skin, Head and Neck Cancer, Neoplasms of the Lung, Breast Cancer, Gastrointestinal Tract Cancer, Tumors of the liver and Biliary Tract, Pancreatic Cancer, Bladder and Renal Cell Carcinomas, Hyperplastic and Malignant Diseases of the Prostate, Testicular Cancer, Gynecologic Malignancies, Soft Tissue and Bone Sarcomas and Bone Metastases, Metastatic cancer of unknown Primary site, Paraneoplastic Syndromes : Endocrinologic / Hematologic, Paraneoplastic Neurologic Syndromes, Oncologic Emergencies, Late Consequences of Cancer and Its Treatment.

5. HEMATOPOIETIC DISORDER:

Haematopoiesis, Anemia and polycythemia, Bleeding and thrombosis, Enlargement of lymph nodes and spleen, Disorders of granulocytes and monocytes, Eosinophilia, Febrile neutrophilia, Iron Deficiency and other Hypoproliferative Anemias, Hemoglobinopathies, Megaloblastic Anemias, Hemolytic Anemias and Acute Blood Loss, Aplastic Anemia, Myelodysplasia, and Related Bone Marrow Failure Syndromes, Polycythemia Vera and other Myeloproliferative Diseases, Acute and chronic Myeloid Leukemia, Malignancies of Lymphoid Cells, Plasma Cell Disorders, Transfusion Biology and Therapy, Hematopoietic Cell Transplantation., Disorders of the Platelet and Vessel Wall, Disorders of Coagulation and Thrombosis, Antiplatelet, Anticoagulant, and Fibrinolytic Therapy.

6. INFECTIOUS DISEASES:

Introduction to infectious Diseases : Host-Pathgen Interacions, Molecular Mechanisms of Microbial pathogenesis, Fever and hyperthermia, fever and rash, Fever of unknown origin, Approach to the Acutely Ill Infected Febrile patient , Immunization Principles and Vaccine Use, Health Advice for international travel ,

Infective Endocarditis, Infections of the Skin, Muscle and Soft Tissues, Osteomyelitis, Intraabdominal Infections and Abscesses, Acute Infectious Diarrheal Diseases and Bacterial Food Poisoning, Clostridium difficile, Sexually Transmitted Disease

Hospital-Acquired Infections, Infections in Transplant Recipients,

Treatment and Prophylaxis of Bacterial Infections,

DISEASES CAUSED BY GRAM POSITIVE BACTERIA:

Pneumococci, Staphylococci, Streptococci and Enterococci, Diphtheria and other Corynebacterial Infections, Listeria Monocytogenes, Tetanus, Botulism, Gas Gangrene and other Clostridial Infections, etc

DISEASES CAUSED BY GRAM NEGATIVE BACTERIA:

Meningococci, Gonococci, Moraxella Species, Haemophilus, HACEK group and Miscellaneous Gram Negative Bacteria, Legionella , Bordetella Infections, Disease Caused by Gram- Negative Enteric Bacteria, Helicobacter Pylori Infections, Pseudomonas, Salmonellosis, Shigellosis, Campylobacters, Cholera and other Vibrios, Brucellosis, Tularemia, Plague and other Yersinia Infections, Bartonella Infections, Donovanosis.,

Nocardiosis, Actinomycosis, Infections Due to Mixed Anaerobic Organisms.

MYCOBACTERIAL DISEASES

Antimycobacterial Agents, Tuberculosis, Leprosy (Hansen's Disease), Nontuberculous Mycobacteria.

SPIROCHETAL DISEASES

Syphilis, Endemic Treponematoses, Leptospirosis, Relapsing Fever, Lyme Borreliosis

DISEASES CAUSED BY RICKETTSIA, MYCOPLASMA, AND CHLAMYDIA

Rickettsial Diseases, Infections Due to Mycoplasmas, Chlamydial Infections.

VIRAL DISEASES : GENERAL CONSIDERATIONS

Medical Virology, Antiviral Chemotherapy, Herpes Simplex Viruses, Varicella-Zoster Virus Infections, Epstein- Barr Virus Infections, Cytomegalovirus and Human Herpesvirus Types 6, 7 and 8. Molluscum Contagiosum and other Poxviruses, Parvovirus, Human Papillomavirus infection, Influenza, Common Viral Respiratory Infections and Severe Acute Respiratory Syndrome (SARS) , Viral Gastroenteritis, Enteroviruses and Reoviruses, Measles (Rubeola), Rubella (German Measles), Mumps, Rabies Virus and other Rhabdoviruses, Infections Caused by Arthropod and Rodent-Borne Viruses, Ebola and Marburg Viruses, Human Retroviruses, Human Immunodeficiency Virus Disease : AIDS and related disorders

FUNGAL AND ALGAL INFECTIONS

Diagnosis and Treatment of Fungal Infections, Histoplasmosis, Coccidioidomycosis, Blastomycosis, Cryptococcosis, Candidiasis, Aspergillosis, Mucormycosis, Miscellaneous Mycoses and Algal Infections, Pneumocystis Infection.

PROTOZOAL AND HELMINTHIC INFECTIONS :

Laboratory Diagnosis, Agents used to treat Infections due to Parasites and Pneumocystis,

Amebiasis and Infection with Free Living Amebas, Malaria and Babesiosis : Diseases Caused by Red Blood Cell Parasites, Leishmaniasis, Trypanosomiasis, Toxoplasma Infection, Protozoal Intestinal Infections and Trichomoniasis, Trichinella and other Tissue Nematodes, Intestinal Nematodes, Filarial and Related Infections, Schistosomiasis and other Trematode Infections, Cestodes.

7. BIOTERRORISM AND CLINICAL MEDICINE;

Microbial Bioterrorism, Chemical Bioterrorism, Radiation Bioterrorism.

8. DISORDERS OF THE CARDIOVASCULAR SYSTEM:

Functional anatomy, physiology and investigations of Cardiovascular system, Approach to the Patient with Cardiovascular Disease, Physical Examination of the Cardiovascular System, Electrocardiography, Noninvasive Cardiac Imaging : Echocardiography, Nuclear Cardiology, and MRI / CT Imaging, Diagnostic Cardiac Catheterization and Angiography., Symptomatology, Chest Discomfort and Palpitations, Dyspnea, Pulmonary edema, Cough and hemoptysis, Hypoxia and Cyanosis, Edema, The Bradyarrhythmias, The Tachyarrhythmia, Normal and abnormal Myocardial Function, Heart Failure and Cor Pulmonale, Cardiac Transplantation and Prolonged Assisted Circulation, Congenital Heart Disease in the Adult, Rheumatic fever, Infective endocarditis, Valvular heart Disease, Pulmonary Hypertension, Cardiomyopathy and Myocarditis, Pericardial Disease, Cardiac Tumors, Cardiac Manifestations of Systemic Diseases, and Traumatic Cardiac Injury, Atherosclerosis : Pathogenesis, Prevention and Treatment of Atherosclerosis, Ischemic Heart Disease, Percutaneous Coronary Revascularization, Hypertensive Vascular Disease, Diseases of the Aorta, Vascular Diseases of the Extremities., Lymphatic disorders.

9. DISORDERS OF THE RESPIRATORY SYSTEM :

Applied anatomy, physiology and investigations of Respiratory system, Approach to the Patient with Disease of the Respiratory System, Disturbances of Respiratory Function, Symptomatology: Dyspnea, Pulmonary edema, Cough, Hemoptysis, Hypoxia, Cyanosis, etc, Asthma, Hypersensitivity Pneumonitis and Pulmonary Infiltrates with Eosinophilia, Environmental Lung Diseases, Pneumonia, Bronchiectasis, Cystic Fibrosis, Chronic Obstructive pulmonary Disease, Interstitial Lung Diseases, Pulmonary thromboembolism, Disorders of the Pleura, Mediastinum, Diaphragm, and Chest Wall. Disorders of Ventilation, Sleep Apnea, Lung Transplantation,

10. CRITICAL CARE MEDICINE

Principles of Critical Care Medicine, Respiratory Failure, Acute Respiratory Distress Syndrome, Mechanical Ventilatory Support, Approach to the Patient with Shock, Severe Sepsis and Septic Shock, Cardiogenic Shock and Pulmonary Edema,

Cardiovascular Collapse, Cardiac Arrest, Sudden Cardiac Death, Acute Confusional States and Coma, Critical Care Neurology.

11. DISORDERS OF THE KIDNEY AND URINARY TRACT:

Applied anatomy, physiology and investigations of Urinary system, Approach to a patient with renal disease, Azotemia and Urinary Abnormalities, Fluid and Electrolyte Disturbances, Acidosis and Alkalosis, Adaptation to Renal Injury, Acute Renal Failure, Chronic Renal Failure, Dialysis in the Treatment of Renal Failure, Transplantation in the Treatment of Renal Failure, Glomerular Diseases, Tubular Disorders, Tubulointerstitial Diseases of the Kidney, Vascular Injury to the Kidney, Nephrolithiasis, Urinary Tract Infections and Pyelonephritis, Urinary Tract Obstruction., Tropical nephropathies.

12. DISORDERS OF THE ALIMENTARY TRACT:

Applied anatomy, physiology and investigations of GIT, Symptomatology: Dysphagia, Nausea, Vomiting and Indigestion, Abdominal pain, Diarrhea, Constipation, Weight Loss, Gastrointestinal Bleeding, Jaundice, Abdominal Swelling and Ascites,

Approach to the Patients with Gastrointestinal Disease, Gastrointestinal Endoscopy, Diseases of the Esophagus, Peptic Ulcer Disease and Related Disorders, Disorders of Absorption, Inflammatory Bowel Disease, Irritable Bowel Syndrome, Familial Mediterranean Fever and other Hereditary Recurrent Fevers, Common Diseases of the Colon and Anorectum and Mesenteric Vascular Insufficiency, Acute Intestinal Obstruction, Acute Appendicitis and Peritonitis., Abdominal tuberculosis, Disorders of diaphragm, Approach To the Patients With Liver Disease, Evaluation of Liver Function, The Hyperbilirubinemias, Acute Viral Hepatitis, Toxic Drug-Induced hepatitis, Chronic Hepatitis, Alcoholic Liver Disease, Cirrhosis and Its Complications, Non cirrhotic portal hypertension, Infiltrative, Genetic and Metabolic Diseases Affecting the Liver, Parasitic diseases of liver, Liver Transplantation, Nutrition in liver disorders, Diseases of the Gallbladder and Bile Ducts, Approach to the Patient with Pancreatic Disease, Acute and Chronic Pancreatitis

13. THE IMMUNE SYSTEM ,CONNECTIVE TISSUE AND JOINTS :

Introduction to the Immune System, The Major Histocompatibility Gene Complex Primary Immune Deficiency Disorders, Allergies, Anaphylaxis, and Systemic Mastocytosis, Autoimmunity and Autoimmune Diseases, Systemic Lupus Erythematosus, Rheumatoid arthritis, Rheumatic Fever, Systemic Sclerosis (Scleroderma) and Related Disorders, Sjogrens syndrome, The Spondyloarthritides, The Vasculitis Syndromes, Behcet's Syndrome, Relapsing Polychondritis, Sarcoidosis, Amyloidosis, Antiphospholipid syndrome, Biological response modifiers, Pain: pathophysiology and management, back and neck pain, Approach to Articular and Musculoskeletal Disorders, Osteoarthritis, Gout and other Crystal Arthropathies, Infectious Arthritis, Fibromyalgia, Arthritis Associated with Systemic Diseases and Other Arthritides, Heritable connective tissue diseases, Periarticular Disorders of the Extremities

14. ENDOCRINOLOGY:

Functional anatomy, physiology and investigations of Endocrine system, Disorders of the Anterior and Posterior Pituitary and Hypothalamus, Diseases of the Thyroid and Parathyroid Glands, Disorders of the Adrenal Cortex, Pheochromocytoma, Diabetes

mellitus, Hypoglycemia, Disorders of the Testes and Male Reproductive System, Disorders of the Ovary and Female Reproductive Tract, The Menopause Transition and Postmenopausal Hormone Therapy, Disorders of Sexual Differentiation, Disorders of puberty, Sexual dysfunction, Hirsutism and virilisation, infertility and fertility control
Endocrine Tumors of the Gastrointestinal Tract and Pancreas, Disorders Affecting Multiple Endocrine System

15. DISORDERS OF BONE AND MINERAL METABOLISM

Bone and Mineral Metabolism in Health and Disease, Disease of the Parathyroid Gland and other Hyper and Hypocalcemic Disorders, Rickets, Osteomalacia, Osteoporosis, Paget Disease and other Dysplasias of Bone

16. DISORDERS OF INTERMEDIARY METABOLISM

Disorders of Lipoprotein Metabolism, Hemochromatosis, The Porphyrias, Disorders of Purine and Pyrimidine Metabolism, Wilson Disease, Lysosomal Storage Disease, Glycogen Storage Disease and other Inherited Disorders of Carbohydrate metabolism Presenting in Adults, Inherited Defects of Membrane Transport

17. NERVOUS SYSTEM DYSFUNCTION :

Applied anatomy, physiology and investigations Of Nervous system, Approach to patient with neurological disease, Neuroimaging in neurological disorders, Symptomatology: Syncope, Faintness, Dizziness and Vertigo, Weakness, Disorders of Movement and Imbalance, Numbness, Tingling and Sensory Loss, Aphasia, Memory Loss, and other focal cerebral Disorders, Sleep Disorders, Headache, Disorders of eyes, disorders of smell, taste and hearing; Seizures and Epilepsy, Cerebrovascular Diseases, Vasculitis and collagen vascular disease affecting central nervous system, Alzheimer's Disease and other Dementias, Parkinson's Disease and other Movement Disorders, Ataxic Disorders, Cerebellar disorders, Amyotrophic Lateral Sclerosis and other Motor Neuron Disease, Nutritional deficiency disorders of nervous system, Disorders of the Autonomic Nervous System, Trigeminal Neuralgia, Bell's Palsy, and other Cranial Nerve Disorders, Craniovertebral anomalies, Disease of the Spinal Cord, Cauda equina, spinal roots and sphincter control, Concussion and other Head Injuries, Raised intracranial pressure, cerebral edema and hydrocephalus, Primary and Metastatic Tumors of the Nervous System, Multiple Sclerosis and other Demyelinating Diseases, Meningitis, Encephalitis, Brain Abscess and Empyema, Neurocutaneous syndrome, Chronic and Recurrent Meningitis, Tuberculosis of nervous system, Neurosyphilis, Prion Diseases, Approach to the Patient with Peripheral Neuropathy, Charcot Marie Tooth Disease and other Inherited Neuropathies, Guillain Barre Syndrome and Other Immune Mediated Neuropathies, Myasthenia Gravis and Other Diseases of the Neuromuscular Junction, Approach to the Patient with Muscle Disease, Muscular Dystrophies and other Muscle Disease, Polymyositis, Dermatomyositis, and Inclusion Body Myositis, Chronic Fatigue Syndrome,

18. PSYCHIATRIC DISORDERS:

Basic considerations, Organic brain syndromes, Mood disorders, Psychotic disorders and Schizophrenia, Anxiety disorders, Somatoform disorders, Psychosexual and Personality disorders, Alcohol and alcoholism, Opioid drug abuse and dependence, Cocaine and other substance abuse, Nicotine addiction, Interface of medicine and psychiatry, Psychiatric emergencies, Treatment of psychiatric disorders

19. POISONING AND TOXICOLOGY :

Basic considerations , Plant poisons, Drug poisoning ,Organophosphate poisoning, Aluminium phosphide poisoning,Other pesticide poisoning,Alcohol poisoning,Corrosive acid poisoning, Corrosive alkali poisoning,Snake bites and Arthropods envenomation, Disorders caused by Reptile bites and Marine animals exposure,Scorpion sting, Ectoparasite infestations, Heavy metal poisoning,Lathyrism,Fluorosis,Epidemic dropsy,Miscellaneous poisonings

20. DERMATOLOGY:

Basic considerations, Approach to a patient with skin disorder, Bacterial skin infections,Fungal skin infections,Viral skin infections,Protozoal and Parasitic skin infestations,Eczema,Photosensitivity dermatosis,Hypersensitivity skin disorders, Acne,acneiform eruptions and rosacea, Hair and nail disorders,Pigmentary skin disorders,Keratinisation and Papulosquamous disorders,Vesiculobullous skin disorders,Metabolic and Nutritional skin disorders,Skin manifestations of systemic disease,Developmental skin disorders,Skin tumors,Genetic skin disorders, Immunologically mediated skin diseases,Cutaneous drug reactions,Leprosy,Sexually transmitted diseases,Mucocutaneous manifestations of AIDS,Therapy of skin disease .

21. MISCELLANEOUS:

Basic considerations of environmental & occupational diseases, Environmental pollution, Environmental disaster, Effects of extremes of temperature, High altitude medicine, Aviation medicine, Effects of high barometric environment, electric shock & lightening injuries, Hanging, Drowning, occupational hazards, Radiation hazards, Recent advances in medicine.