

M.D. DERMATOLOGY AND VENEREOLOGY

Dermatology

1. Fundamental

- History taking and examination of dermatological patient
- Type of skin lesions
- Distribution patterns
- Aids in diagnosis of skin diseases etc. in relation to the skin.
- Epidermal cell kinetics and keratinization.

- The structure, functions and development of human skin.
- Ultra structural aspects of epidermis, epidermal appendages, dermo-epidermal junction, dermis, and sub-cutis.
- Immunology, molecular biology and genetics
- Lipids of epidermis and sebaceous glands.
- Percutaneous absorption.
- Skin as an organ of protection, barrier function and thermoregulation.
- Biology of eccrine and apocrine sweat glands
- Biology of melanocytes and melanin formation
- Biology of hair follicles, sebaceous glands and nails
- Epidermal proteins
- Dermal connective tissue: collagen, elastin, reticulin, basement membrane and ground substance.
- Metabolism of carbohydrates, proteins, fats and steroids by the skin.
- Cutaneous vasculature and vascular reactions.
- Mechanism of cutaneous wound healing.
- Cellular and molecular biology of cutaneous inflammation and arachidonic and metabolism.
- Role of Extracellular matrix metalloproteinases in connective tissue remodeling.
- Innate immunity skin
- Immunologic aspects of epidermis /Skin – An immunologic barrier
- HLA system
- Immunoglobulins
- Cytokines and chemokines
- Lymphocytes, neutrophils, eosinophils, basophils and mast cells
- Complement system.
- Hypersensitivity and allergy / DNA repair
- Cutaneous carcinogenesis (chemical, viral & radiation)
- Photo immunology
- Basics of cutaneous bacteriology, mycology, virology, parasitology and host resistance.
- Common laboratory procedures, stains and culture media etc, related to the cutaneous diagnosis.
- Basic pathologic patterns and reactions of skin. • Common laboratory stains and procedures used in the histopathologic diagnosis of skin diseases and special techniques such as immunofluorescence, immunoperoxidase and other related techniques.
- Topical and systemic therapy pertaining to Dermatology, Venereology and leprosy.

CLINICAL DERMATOLOGY

- Epidemiology of skin disease
- Genetics and genodermatoses
- The neonate
- Naevi and other developmental defects
- Disorders of keratinisation
- Psoriasis
- Pruritis
- Urticaria and Mastocytosis
- Eczema, Lichenification, Prurigo and Erythroderma
- Atopic Dermatitis
- Contact Dermatitis: Irritant
- Contact Dermatitis: Allergic
- Occupational Dermatoses
- Mechanical and Thermal Injury
- Sports Dermatology and Skin Problems in Warfield
- Cutaneous Photobiology
- Bacterial Infections
- Mycobacterial Infections
- Virus Infections and Prions and the skin
- HIV and the Skin
- Mycology
- Parasitic Worms and Protozoa
- Diseases caused by Arthropods and other noxious Animals
- Genetic Blistering Diseases
- Immunobullous Diseases
- Lichen Planus and Lichenoid Disorders
- Disorders of the Sebaceous Glands
- Rosacea, Perioral Dermatitis and Similar Dermatoses, Flushing and Flushing Syndromes
- Disorders of Sweat Glands
- Disorders of Connective Tissue
- Subcutaneous Fat
- Diseases of the Veins and Arteries: Leg Ulcers
- Disorders of Lymphatic Vessels
- Purpura and Microvascular Occlusion
- Vasculitis, Neutrophilic Dermatoses and Related Disorders
- The 'Connective Tissue Diseases'
- Non-Melanoma Skin Cancer and Other Epidermal Skin Tumours
- Tumours of the Skin Appendages
- Lentigo, Melanocytic Naevi and Melanoma- Histiocytoses
- Soft-Tissue Tumours and Tumour-like Conditions
- Cutaneous Lymphomas and Lymphocytic Infiltrates
- Disorders of Skin Colour
- Metabolic and Nutritional Disorders
- Necrobiotic Disorders
- Sarcoidosis
- Systemic Disease and the Skin
- The Skin and the Nervous System

- Psychocutaneous Disorders
- Disorders of Nails
- Disorders of Hair
- The Oral Cavity and Lips
- The Breast
- The Genital, Perianal and Umbilical Regions
- General Aspects of Treatment
- Topical Therapy
- Systemic Therapy
- Drug Reactions, Cutaneous manifestations of Drug abuse, Cutaneous reactions to Cytokines and Growth Factors.
- Erythema Multiforme, Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis
- Dermatological Surgery
- Lasers and Flashlamps in the Treatment of Skin Disorders
- Radiotherapy and Reactions to Ionizing Radiation

LEPROSY

- Approach to the patient with leprosy
- Epidemiological Aspects
- Structure, biochemistry, microbiology of *Mycobacterium leprae*
- Animal models
- Pathogenesis
- Classification
- Immunology and molecular biological aspects
- Histopathology and diagnosis including laboratory aids
- Clinical features • Reactions
- Systemic involvement (Ocular, bone, mucosa, testes and endocrine etc.)
- Pregnancy and leprosy
- HIV infection and leprosy
- Therapeutic aspects including newer drugs.
- Immunotherapy
- Disabilities, deformities and Rehabilitation
- Prevention, education and counseling
- National Leprosy Control and Elimination Programme

VENEREAL DISEASES

- Clinical approach to the patient of sexually transmitted disease.
- Anatomy of Male & Female Genitalia.
- Epidemiological aspects of STDs
- Viral STD including HIV, Herpes, HPV, Molluscum Contagiosum, EBV, etc
- Bacterial STDs; Syphilis, Gonorrhoea, Chancroid, Donovanosis.
- Chlamydial infections; Lymphogranuloma Venereum, Urethritis, Cervicitis,
- NGU, Nonspecific Vaginitis.

- Fungal Infections; Candidiasis.
- Protozoa ; Trichomoniasis.
- Ectoparasite : Scabies, Pediculosis, Infestation.
- Syndromic Management of STDs
- STDs in Reproductive health & Pediatric
- STDs & HIV.
- Prevention, Counselling & Education of different STDs including HIV.
- National Control Programmes of STDs & HIV.
- Medicolegal, Social Aspects of STDs including Psychological & Behavioural abnormalities in STD patients.