

## **M.D. DERMATOLOGY AND VENEREOLOGY**

### **POSTINGS**

The first year junior residents shall be posted indoor for 8 months exclusively. For the remaining 28 months the students will rotate through outdoor, side laboratory, minor OT, speciality clinics, i.e. leprosy, STD, psoriasis, pigmentation, allergy and dermatosurgery.

- Dermatology Ward – 6 months
- General Skin OPD – 16 months
- Minor OT& Side Laboratory– 6 months
- STD Clinic – 6 months
- Speciality Posting-2months

The postings will be spread over the entire period. During postings 2nd and 3rd year residents or senior residents will give cover to first year residents and have active involvement in the diagnosis, investigations and treatment of the admitted patients.

### **Teaching Programme**

- Weekly Teaching ward rounds
- Clinical case conference
- Seminars
- Journal club
- Case presentation and discussion In Leprosy, STD
- Slide discussion
- Dermatopathology discussion biweekly

### **Syllabus**

Main subjects to be covered

1. Dermatology
2. Venereology
3. Leprosy
4. Dermatopathology
5. Dermatosurgery (including lasers)

#### **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.

## TOPICS RELATED TO ALLIED BASIC SCIENCES

- 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.

## **Dermatosurgery**

1. Teaching methods for Dermatosurgery
2. Teaching methods would include at least 10 theory lectures in the form of seminars and journal club.

3. Practical demonstration of techniques by a faculty member of a representative case of each disease
4. Would be part of their Minor OT posting, dermatosurgery clinic (4 months). They would also be required to assist during the procedures.
5. Theory – The subject is included in paper IV of the theory examination and at least one short note would be from the dematosurgical procedures.
6. Practical – They would be subjected to questions on various dermatosurgical procedures and instruments related to these procedures during their viva voce examination.
7. Teaching Methods for Dermatopathology
  - 10 theory lectures in form of seminar, journal club
  - Dermatopathology discussion every week.

### **Research activity**

The candidate will be required to undertake independent research work or associate himself/herself with on-going departmental research work.

### **Internal assessment**

This will be carried out every three monthly by means of written test and practical with viva examination every six months. It would include dermatopathology and dermatosurgery.

### **THESIS**

Each student is expected to write thesis under the guidance of one or more faculty members as per the institute rules. The work is carried out over and above routine duties. The thesis topic and its progress is discussed in departmental faculty meeting. The protocol to be submitted within 6 months of joining and thesis submission 6 months before completion of the course.

### **Evaluation**

1. Weekly by senior resident/ a consultant for regularity, patient care, records and library search.
2. End of ward posting by consultant/senior resident
3. Quarterly- with theory, clinical and viva by all consultants of the department

### **Recommended books**

1. Fitzpatrick;s Dermatology in general medicine 7th edition
2. Rook;s text book of Dermatology 8th edition
3. Dermatology (Jean L bologna)
4. IADVL text book of Dermatology 3rd edition
5. Sexually transmitted diseases (King K.Holmes) 2nd edition

6. Venereal diseases (Ambrose King, Claude Nicol, Philip Rodin 4th edition)
7. Hand book of Leprosy (Jopling)
8. Leprosy (Robert C Hastings)
9. Journal of American Academy of Dermatology
10. British Journal of Dermatology
11. Indian journal of Dermatology, Venereology&Leprology
12. Indian Journal of Leprosy

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