



College of Physicians and Surgeons of Mumbai

Syllabus for CPS-PG-Course

DDV-DIPLOMA IN DERMATOLOGY AND VENEREOLOGY

College of Physicians and Surgeons of Mumbai

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DDV-DIPLOMA IN DERMATOLOGY AND VENEREOLOGY

OBJECTIVES

At the end of this training a candidate should be able to :-

1. Diagnose and manage independently common skin diseases, sexually transmitted diseases and leprosy.
2. Manage independently and efficiently all medical emergencies related with skin, leprosy and venereal diseases.
3. Adopt preventive measures at individual and community levels against communicable skin, venereal diseases and leprosy.
4. Teach requisite knowledge and laboratory skills to other medical/paramedical team members.
5. Adopt a compassionate attitude towards the patients (and their families) under his/ her charge.
6. Critically evaluate and initiate investigation for solving problems relating to skin, venereal diseases and leprosy.

COURSE DESCRIPTION

Eligibility: A candidate should possess MBBS degree/ equivalent degree as per provisions of Indian Medical Council Act.

Duration: 2 Years

SKILLS TO BE LEARNT

History taking for dermatology, venereology and leprosy

1. Describe cutaneous findings in dermatological terms in a systematic way.
2. Evaluate and manage the common diseases in dermatology and have a broad idea how to approach an uncommon diseases.
3. Evaluate and manage STD cases
4. Evaluate and manage HIV positive cases

5. Systemic examination relevant for dermatologic condition
6. Maintain basic skills like pulse, blood pressure, chest and cardiac auscultation learnt in MBBS
7. Care of dermatologic emergencies like TEN, Pemphigus, necrotic ENL, angioedema, drug reactions etc.
8. Management of paediatric cases with skin diseases
9. To achieve adequate skills for tests done in side laboratory in day-to-day practice and be familiar with other sophisticated investigations.

Fundamentals of Cutaneous Diagnosis-

Basic skin lesions, history taking, examination of the patient including relevant diagnostic, clinical tests and aids.

SYLLABUS

Topics Related to Allied Basic Sciences

- The structure, function and development of human skin. Skin as a barrier
- Ultra structural aspects of epidermis, epidermal appendages, dermoepidermal junction, dermis, and sub-cutis.
- Immunology, Molecular biology and genetics in relation to the skin.
- Epidermal cell kinetics and Keratinization
- Lipids of epidermis and sebaceous glands
- Percutaneous absorption
- Biology of eccrine and apocrine sweat glands
- Biology of hair follicles, sebaceous glands and nails
- Biology of melanocytes and melanin formation
- Disorders of keratinization 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 responses
- Mechanism of cutaneous wound healing

- Cellular and molecular biology of cutaneous inflammation
- Immunologic aspects of skin
- HLA system, Immunoglobulins, cytokines
- Complement system
- Hyper-sensitivity and allergy
- Cutaneous carcinogenesis
- Basic of cutaneous bacteriology, mycology, virology, Parasitology and defence mechanism.
- Common laboratory procedures, stains, culture media and related serological tests
- Basic pathologic reaction pattern in skin
- Common and special histopathological stains and procedures used in the diagnosis of skin diseases and Special techniques such as immunofluorescence, immunoperoxidase and other related techniques.

Clinical Dermatology

Epidemiology of cutaneous diseases.

- Psychologic aspects of skin disease and psycho-cutaneous disorders, Pathophysiology and clinical aspects of pruritus.

Papulo-squamous Diseases

- Psoriasis, Pityriasisrubra pilaris, pityriasisrosea, Lichen Planus, lichenoid eruptions, Parapsoriasis, Palmoplantar Keratodermas.
- Darier's disease. Prorokeratosis
- Ichthyoses and ichthyosiform dermatoses, Keratodermas

Vesiculo-bullous Disorders

- Pemphigus group of disorders
- Bullous pemphigoid
- Chronic bullous disease of childhood
- Familial benign pemphigus

- Herpes gestationis
- Mechanobullous (hereditary and acquired)
- Epidermolysis bullosa acquisita
- Dermatitis herpetiformis
- Erythema Multiforme
- Subcorneal pustular dermatoses

Disorders of Epidermal Appendages

- Disorders of hair and nails
- Disorders of sebaceous glands: Acne
- Rosacea, Perioral dermatitis,
- Disorders of eccrine and apocrine sweat glands

Tumours

- Naevi and hamartomas
- Precancerous Skin lesions, Squamous cell carcinoma and Basal cell carcinoma, malignant melanoma.
- Paget's disease, Keratoacanthoma.
- Benign epithelial tumours, appendageal tumours

Disorders of pigmentation

- Vitiligo Albinism, Benign neoplasia and hyperplasias of melanocytes, Dysplastic melanocytic nevi, hyperpigmentation.

Inflammatory Disorders of the Dermis

- Acute Febrile Neutrophilic dermatosis
- Erythema elevatumdiutinum
- Cutaneous Eosinophilic diseases
- Granuloma faciale
- Pyoderma gangrenosum
- Erythema annularecentrifugum and other Figurate Erythemas

- Granuloma annulare
- Malignant atrophic papulosis
- Neoplasms, Pseudo neoplasms and Hyperplasias of the Dermis
- Vascular Anomalies, Kaposi's Sarcoma
- Anetoderma and other Atrophic Disorders of the skin
- Neoplasias and hyperplasias of Neural and Muscular origin
- Elastosis PerforansSerpiginosa, Reactive Perforating Collagenosis, Kyrle's disease

- **Lymphomas, Pseudo lymphomas and Related Conditions**

Disorders of Subcutaneous Tissue

- Panniculitis
- Lipodystrophy
- Neoplasms of the subcutaneous Fat

Disorders of the Mucocutaneous Integument

- Biology and disorders of oral mucosa
- Disorders of anogenitalia of males and females

Cutaneous changes in disorders of altered reactivity

- Genetic Immunodeficiency Disease
- Urticaria and Angioedema
- Disorders associated with complement abnormalities
- Graft-versus-Host Disease
- Muco-cutaneous manifestations in immunosuppressed host other than HIV-infection
- Contact Dermatitis
- Auto sensitization dermatitis
- Atopic dermatitis (Atopic Eczema)

- Nummular eczematous dermatitis
- Seborrhoeic dermatitis
- Vesicular palmoplantar eczema
- Erythrodermas

Skin Changes Due to Mechanical and Physical Factors

- Occupational skin disease Radiobiology of the skin.
- Skin problems in amputee.
- Sports Dermatology.
- Skin problems in war field. Decubitus ulcers.
- Radiation to the skin
- Skin diseases due to cold, heat

Photobiology of skin

- Normal reaction to ultra violet rays and sun exposure

Disorders Due to Drugs and Chemical Agents

- Erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis
- Cutaneous reactions and mucocutaneous reactions to chemicals and drugs
- Pathological response to UVR and sun exposure
- Cutaneous manifestations of drug Abuse Abnormal vascular response
- Erythemas including annular erythemas
- Urticaria
- Vasculitis

Dermatology and age of man

- Ageing of skin
- Neonatal dermatological problems
- Pediatric and adolescent problems
- Geriatric dermatological problems

Skin Lesions in nutritional, heritable and metabolic disorders

- Cutaneous Changes in nutritional disorders.
- Acrodermatitis enteropathica and zinc deficiency disorders.
- Cutaneous Changes in errors of amino acid metabolism
- Porphyrrias
- Xanthomas
- Disorders of lipid metabolism and storage Mucinoses
- Amyloidosis
- Angio keratomacropriodiffusum
- Lipid proteinosis
- Malabsorption
- Vitamin and mineral deficiency and excess

Skin Manifestations of systemic disorders

- Skin and disorders of the alimentary tract
- Hepatobiliary system and the skin
- Cutaneous changes in renal disorders, cardiovascular, pulmonary disorders and endocrinal disorders
- Skin changes in pregnancy
- Cutaneous changes in haematological disease (Langerhan Cells and other cutaneous histiocytosis, Mastocytoses Syndrome)
- Cutaneous changes in endocrine disorder, Flushing and carcinoid syndrome.

Genodermatosis

- Phacomatosis
- Tuberosclerosis
- Incontinentia pigmentation
- Ectodermal dysplasia
- Xeroderma pigmentosum

Connective tissue disorder and Skin manifestations of rheumatological diseases

- Reiter's syndrome.
- Arteritis and venulitis.
- Lupus erythematosus
- Dermatomyositis
- Scleroderma
- MCTD (Mixed connective Tissue Disorders)
- Relapsing polychondritis
- Rheumatoid arthritis, rheumatic fever and gout
- Sjogren's syndrome
- Raynaud's phenomenon
- Multicentric reticulo histiocytosis

Cutaneous Manifestations of Disease in Other Organ Systems

- Sarcoidosis of the skin
- Cutaneous Manifestations of Internal Malignancy
- Acanthosis Nigricans
- Papular Mucinosis
- Neurocutaneous Disease
- Tuberous Sclerosis Complex
- Neurofibromatosis
- Ataxia Telangiectasia
- Behcet's Disease

Bacterial infections

- Pyodermas: Staphylococcus aureus, Streptococcus, and others
- Staphylococcal scalded-skin syndrome
- Soft tissue infections: Erysipelas, Cellulitis
- Systemic bacterial infections with cutaneous manifestations
- Cutaneous tuberculosis and atypical mycobacterial infections

- Actinomycetoma

Fungal infections

- Superficial fungal infection: (dermatophytosis, yeast, others)
- Deep fungal infections

Viral and rickettsial infections

- Herpes simplex virus infections
- Varicella Zoster infection
- Human papillomavirus
- Molluscum contagiosum
- Hepatitis B, C
- Rubella
- Measles

Parasitic and protozoal infestations

- Scabies
- Pediculosis.
- Arthropods and skin.

Topical Therapy:-

- Pharmacokinetics and topical applications of drugs Principles of topical therapy, topical formulations

Topical Agents:-

- Glucocorticoids, analgesics, anaesthetics, anti-inflammatory, anti-microbial, anti-parasitic, anti-perspirants, anti-pruritic, anti-viral, astringents, bleaching agents, keratolytics and keratoplastic agents.

- Therapies, anti-viral, topical antibiotics, topical antifungal agents, sunscreens, cytotoxic agents, retinoid, Vit D3 analogues, cosmetics and skin care in practice, emollients and moisturizer.

Systemic Therapy:

- Systemic glucocorticoids, antibiotics, anti leprosy and anti tuberculous agents, sulfones, aminoquinolines, cytotoxic and anti metabolic agents, oral retinoids, antihistamines, antiviral drugs, oral antifungal agents, immunosuppressive and immunomodulatory drugs, thalidomide. Antiparasitic drugs, antiandrogens, interferons, biologics, intravenous immunoglobulins, antiplatelet agents, psychotropic agents. Other misc. Systemic drugs

Dermatosurgery including Cosmetic dermatology :-

- Local anaesthesia and nerve blocks, electro surgery/ cautery, vitiligo surgeries, cryotherapy, electrolysis, tattooing, intra-lesional injections, iontophoresis, dermabrasion, biopsy techniques, hair and nail minor surgeries, excision surgeries.
- Lasers in dermatology - for vascular, hair and pigmented disorders.
- Skin resurfacing : chemical peels
- Skin resurfacing : dermabrasion
- Skin resurfacing : Laser
- Skin punch grafting
- Wound dressings
- Sclerotherapy for varicose and telangiectatic veins Botulinum injections.
- Tumescant liposuction
- Substances for soft tissue augmentation
- Hair transplantation and alopecia reduction
- Cryosurgery
- Mohs micrographic surgery
- Nail surgery

- **Photo chemotherapy and Photo therapy including principles and use of Narrow band UVB, PUVA, UVB in Skin diseases.**

STD :-

- Clinical approach to the patient with STD
- Anatomy of male and female genitalia, Epidemiology of STDs, Human Sexuality. Viral STDs including HIV, HSV, HPV, Molluscum contagiosum, EBV etc.
- Bacterial STDs : Syphilis, gonorrhoea, chancroid, donovanosis, bacterial vaginosis
- Chlamydial and mycoplasma infections: Lymphogranuloma venereum, urethritis, cervicitis, NGU
- Fungal : Candidiasis
- Protozoal : Trichomoniasis
- Ectoparasitic : scabies, pediculosis infestations. Syndromic management of STDs
- STDs in reproduction health and paediatrics STDs and HIV
- Post exposure prophylaxis
- Prevention, counseling and education of different STDs including HIV National control programmes of STDs and HIV infection
- Medicolegal, social aspects of STDs including psychological and behavioural abnormalities in STD patients.

Management of Antiretroviral Therapy of Adults and Adolescents.

- Diagnosis of HIV Infection in Adults and Adolescents.
- Assessment of Adults and Adolescents with HIV Infection and pre- ART Care and Follow-up.
- Prophylaxis of Opportunistic Infections. -ART in Adults and Adolescents.
- Routine Monitoring of Patients on ART.
- ART in pregnant Women, PPTCT and Previous Exposure to NVP.
- Considerations for Co-infection with HIV.
- Antiretroviral Drug Toxicity.
- ART Treatment Failure and When to Switch.

- Choice of ARV Regimens in the Event of Failure of First-line Regimens.
- Nutritional Aspects of HIV.
- Palliative Care in HIV.
- NACO Standardized Reporting and Recording System.
- Management of Occupational Exposure including Post-exposure Prophylaxis.
- Cutaneous Manifestation and Lab-diagnosis of HIV.
- Prevention aspect of STDs (Condoms, Vaccines etc).
- Prevention, counseling and education of different STDs including HIV
- National control programmes of STDs and HIV infection
- Medicolegal, social aspects of STDs including psychological and behavioural abnormalities in STD patients.

- **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

Continuing Medical Education:

- Dermatopathology
- Dermoscopy
- Skin in internal medicine
- Genodermatoses
- Autoimmune diseases
- Contact Dermatitis
- Ultraviolet therapy
- Vitiligo
- Pigmentary diseases
- Leprosy
- Faculty development

Books and journals:

- Indian Journal of Dermatology
- International Journal of Dermatology
- Indian Journal of Sexually Transmitted Infections and AIDS
- Journal of American Academy of Dermatology
- Journal of European Academy of Dermatology and Venereology

Log Book:

A log book has to be maintained by all students in which a written record of all the ward procedures done, ICU procedures done, cases seen, interesting cases discussed is kept. This log book has to be regularly counter checked by the teacher. The log book has to be submitted to the college whenever asked for and has to be brought by the candidate for the practical examination.

DDV-DIPLOMA IN DERMATOLOGY AND VENEREOLOGY**EXAMINATION PATTERN****Theory Examination:**

PAPER I	PAPER II	PAPER III
ALL MEDICAL BASIC SCIENCE RELATED TO THE SKIN IN VARIOUS REGIONS AND RELATED MUCOUS MEMBRANE AND THE GENITO-URINARY TRACT OF BOTH THE SEXES OF ALL AGES	SKIN AND RELATED MUCOUS MEMBRANE DISEASES INCLUDING RECENT ADVANCES AND PHARMACOTHERAPEUTICS	SEXUALLY TRANSMITTED DISEASES INCLUDING AIDS, LEPROSY SOCIAL ASPECTS AND CONTROL
Section I	Section I	Section I
Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks Total 50 Marks	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks Total 50 Marks	Q.1. 10 Marks Q.2. 10 Marks Q.3. 10 Marks Q.4. 10 Marks Q.5. 10 Marks Total 50 Marks
Section II	Section II	Section II
Q.6. 10 Marks Q.7. 10 Marks Q.8. 10 Marks Q.9. 10 Marks Q.10. 10 Marks Total 50 Marks	Q.6. 10 Marks Q.7. 10 Marks Q.8. 10 Marks Q.9. 10 Marks Q.10. 10 Marks Total 50 Marks	Q.6. 10 Marks Q.7. 10 Marks Q.8. 10 Marks Q.9. 10 Marks Q.10. 10 Marks Total 50 Marks
Section I + II = 100	Section I + II = 100	Section I + II = 100
Total Theory = 300 Marks, Passing = 150 (i.e. 50%) Marks in aggregate		

Practical Examination:		Marks
Paper - IV	Clinical –Skin Diseases	100
Paper - V	Clinical – Sexually Transmitted Diseases & Leprosy	100
Paper - VI	Practical, Viva-Voce Examinations, Instruments & Specimens	100
Total Marks	(Aggregate marks for passing is 50% out of total.)	300