Curriculum

DrNB Super Specialty





Plastic Surgery (Direct 6 Year)

- **♦** Programme Goal & Objectives
- **♦** Teaching and Training Activities
- **♦** Syllabus
- **+** Competencies
- **♦** Log Book
- **♦** Recommended Text Books and Journals

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I. PROGRAMME GOAL & OBJECTIVES

A. Programme Goal

The goal of DNB in Plastic Surgery (Direct 6 years course) course is to produce a competent surgeon who:

- Recognizes the health needs of adults and carries out professional obligations in keeping with principles of National Health Policy and professional ethics;
- Has acquired the competencies pertaining to Plastic Surgery (Direct 6 years course) that are required to be practiced in the community and at all levels of health care system;
- Has acquired skills in effectively communicating with the patients, family and the
- community;
- Is aware of the contemporary advances and developments in medical sciences.
- Acquires a spirit of scientific enquiry and is oriented to principles of research
- methodology; and
- Has acquired skills in educating medical and paramedical professionals.

B. Programme Objectives

At the end of the DNB Plastic Surgery (Direct 6 years course), the student should be able to:

- Recognize the key importance of medical problems in the context of the health priority of the country
- Practice the specialty of Plastic Surgery in keeping with the principles of professional ethics;
- Identify social, economic, environmental, biological and emotional determinants of Plastic Surgery and know the therapeutic, rehabilitative, preventive and promotion
- Measures to provide holistic care to all patients;
- Take detailed history, perform full physical examination and make a clinical diagnosis;
- Perform and interpret relevant investigations (Imaging and Laboratory); Perform and interpret important diagnostic procedures;
- Diagnose illnesses in adults based on the analysis of history, physical examination and investigative work up;

- Plan and deliver comprehensive treatment for illness in adults using principles of rational drug therapy;
- Plan and advise measures for the prevention of diseases;
- Plan rehabilitation of adults suffering from chronic illness, and those with special needs;
- Manage emergencies efficiently;
- Demonstrate skills in documentation of case details, and of morbidity and mortality data
- Relevant to the assigned situation;
- Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities;
- Demonstrate communication skills of a high order in explaining management and prognosis, providing counseling and giving health education messages to patients, families and communities.
- Develop skills as a self-directed learner, recognize continuing educational needs;
 use appropriate learning resources, and critically analyze relevant published
 literature in order to practice evidence-based medicine;
- Demonstrate competence in basic concepts of research methodology and epidemiology;
- Facilitate learning of medical/nursing students, practicing surgeons, paramedical health workers and other providers as a teacher-trainer;
- Play the assigned role in the implementation of national health programs, effectively and responsibly;
- Organize and supervise the desired managerial and leadership skills;
- Function as a productive member of a team engaged in health care, research and education.

II. TEACHING AND TRAINING ACTIVITIES

The fundamental components of the teaching programme should include:

- Case presentations & discussion- once a week
- Seminar Once a week
- Journal club- Once a week
- Grand round presentation (by rotation departments and subspecialties)- once a week
- Faculty lecture teaching- once a month
- Clinical Audit-Once a Month

- A poster and have one oral presentation at least once during their training period in a recognized conference.
- Attendance of one National conference of Association of Plastic Surgeons of India and one speciality conference / regional conference is a must (specialty conference means Cleft lip and palate conference, Hand, Microsurgery, Burns or Aesthetic surgery. Regional means State or Zonal meetings)
- One paper publication preferably peer reviewed.

Microsurgery Lab Course: All trainees must undergo a week long microsurgery lab course. Trainees must become proficient in using loupes and microscope. This is mandatory as trainees who are not proficient in microsurgery when they pass out are at a disadvantage.

Fracture Fixation Course: Recommended to attend the AO course on fracture fixation for Cranio Maxilla Facial and Hand. The rounds should include bedside sessions, file rounds & documentation of case history and examination, progress notes, round discussions, investigations and management plan) interesting and difficult case unit discussions.

The training program would focus on knowledge, skills and attitudes (behavior), all essential components of education. It is being divided into theoretical, clinical and practical in all aspects of the delivery of the rehabilitative care, including methodology of research and teaching.

Theoretical: The theoretical knowledge would be imparted to the candidates through discussions, journal clubs, symposia and seminars. The students are exposed to recent advances through discussions in journal clubs. These are considered necessary in view of an inadequate exposure to the subject in the undergraduate curriculum.

Symposia: Trainees would be required to present a minimum of 30 topics based on the curriculum in a period of six years to the combined class of teachers and students. A free discussion would be encouraged in these symposia. The topics of the symposia would be given to the trainees with the dates for presentation.

Clinical: The trainee would be attached to a faculty member to be able to pick up methods of history taking, examination, prescription writing and management in rehabilitation practice.

Bedside: The trainee would work up cases, learn management of cases by discussion with faculty of the department.

Journal Clubs: This would be a weekly academic exercise. A list of suggested Journals is given towards the end of this document. The candidate would summarize and discuss the scientific article critically. A faculty member will suggest the article and moderate the discussion, with participation by other faculty members and resident doctors. The contributions made by the article in furtherance of the scientific knowledge and limitations, if any, will be highlighted.

Research: The student would carry out the research project and write a thesis/ dissertation in accordance with NBE guidelines. The trainee would also be given exposure to partake in the research projects going on in the departments to learn their planning, methodology and execution so as to learn various aspects of research.

III. SYLLABUS

Theory

Principles, Techniques, and Basic Sciences

- Techniques and principles in Plastic Surgery
- Wound Healing: Normal and Abnormal
- Wound care
- The Blood Supply of the Skin
- Muscle flaps and their Blood supply
- Transplant Biology and Applications to Plastic Surgery (Direct 6 years course)
- Implant Materials and biomaterials
- Principles of Microsurgery
- Microsurgical Repair of Peripheral Nerves and Nerve Grafts
- Tissue Expansion

Plastic Surgery and innovation in medicine

- History of reconstructive and aesthetic surgery
- Psychological aspects of Plastic Surgery
- The role of ethics in Plastic Surgery
- Business principles for plastic surgeons

- Medico-legal issues in Plastic Surgery
- Photography in Plastic Surgery
- Patient safety in Plastic Surgery
- Local anesthetics in Plastic Surgery
- Evidence-based medicine and health services research in Plastic Surgery
- Genetics and prenatal diagnosis
- Principles of cancer management
- Stem cells and regenerative medicine

Aesthetic

- Managing the cosmetic patient
- Aesthetic Surgery of the Face
- Nonsurgical skin care and rejuvenation
- Botulinum toxin (BoNT-A)
- Soft-tissue fillers
- Facial skin resurfacing
- Anatomy of the aging face
- Forehead rejuvenation
- Blepharoplasty
- Secondary blepharoplasty:
- Asian facial cosmetic surgery
- Cutaneous Resurfacing: Chemical Peeling, Dermabrasion and laser resurfacing
- Filler Materials
- Botulinum Toxin
- Structural Fat grafting
- Blepharoplasty
- Rhinoplasty
- Liposuction
- Abdominoplasty and Lower Truncal Circumferential Body Contouring
- Facial Skeletal Augmentation with Implants
- Osseous Genioplasty
- Hair Transplantation
- Facelift
- Neck rejuvenation
- Structural fat grafting
- Skeletal augmentation
- Anthropometry, cephalometry, and orthognathic surgery

- Hair restoration: A comprehensive review of techniques and safety
- Abdominoplasty procedures
- Lipoabdominoplasty
- Lower bodylifts
- Buttock augmentation
- Upper limb contouring
- Post-bariatric reconstruction
- Aesthetic genital surgery

Breast

- Anatomy of the breast
- Breast augmentation
- Current concepts in revisionary breast surgery
- Mastopexy
- Breast Reduction
- Gynecomastia
- Breast Reconstruction: Prosthetic Techniques
- Latissimus Dorsi Flap Breast Reconstruction
- Breast Reconstruction: Tram Flap Techiniques
- Breast Reconstruction- Free Flap Techniques
- Nipple Reconstruction
- Breast cancer: Diagnosis therapy and oncoplastic techniques The oncoplastic approach to partial breast reconstruction
- Patient-centered health communication
- Imaging in reconstructive breast surgery
- Congenital anomalies of the breast
- Poland syndrome
- Fat grafting to the breast

Principles of Craniofacial distraction Skin and Soft Tissue

- Dermatology for Plastic Surgeons
- Mohs Micrographic Surgery
- Congenital Melanocytic Nevi
- Malignant Melanoma
- Thermal, Chemical and Electric Injuries

- Principles of Burn Reconstruction
- Radiation and Radiation Injuries
- Lasers in Plastic Surgery (Direct 6 years course)

Congenital Anomalies and Pediatric Plastic Surgery

- Embryology of the Head and Neck
- Vascular Anomalies
- Cleft Lip and Palate
- Non syndromic Craniosynostosis and Deformational Plagiocephaly
- Craniosynostosis syndrome
- Craniofacial Microsomia
- Orthognathic Surgery
- Craniofacial Clefts and Hypertelorbitism
- Miscellaneous Craniofacial Conditions
- Otoplasty and Ear Reconstruction

Head and Neck

- Soft tissue and Skeletal injuries of the Face
- Head and Neck Cancer and Salivary Gland Tumors
- Skull Base Surgery
- Craniofacial and Maxillofacial Prosthetics
- Reconstruction of the Scalp, Calvarium and Forehead
- Reconstruction of the Lips
- Reconstruction of the Cheeks
- Nasal Reconstruction
- Reconstruction of the Eyelids, Correction of Ptosis and Canthoplasty
- Facial Paralysis Reconstruction
- Mandible Reconstruction
- Reconstruction of Defects of the Maxilla and Skull Base
- Reconstruction of the Oral Cavity, Pharynx and Esophagus
- Tumors of Head & Neck

Cleft Lip and Palate and Craniofacial Anomalies

- Embryology of head and neck (excluding central nervous system).
- Regional anatomy of head and neck.
- Embryogenesis of cleft lip and palate.

- Cleft lip and palate, alveolar clefts.
- Velopharyngeal incompetence.
- Orthodontics, speech therapy in cleft lip and palate.
- Principles of craniofacial surgery.
- Rare craniofacial clefts, Tessier's clefts.
- Craniosynostosis, hypertelorism, craniofacial microsomia

Trunk and Lower Extremity

- Thoracic Reconstruction
- Abdominal Wall Reconstruction
- Lower- Extremity Reconstruction
- Foot and Ankle Reconstruction
- Reconstruction of the Perineum
- Lymphedema
- Pressure Sores
- Reconstruction of the Penis
- Diabetic Foot Care

Hand

- Development of Hand Surgery
- Principles of Upper Limb Surgery
- Radiologic Imaging of the Hand and Wrist
- Soft- tissue Reconstruction of the Hand
- Fractures and Ligamentous Injuries of the Wrist
- Fractures, Dislocations, and Ligamentous Injuries of the Hand
- Tendon Healing and Flexor Tendon Injury
- Repair of the Extensor Tendon System
- Infections of the Upper Limb
- Tenosynovitis
- Compression Neuropathies in the Upper Limb and Electrophysiologic Studies
- Thumb Reconstruction
- Tendon Transfers
- Congenital Hand Anomalies
- Duputyren's Disease
- Replantation in the Upper Extremity
- Upper Limb Arthritis

- Upper Limb Amputation and Prosthesis
- Management of Spastic Hands
- Basic principles of Wrist Surgery

Burns

- Thermal burns.
- Electrical burns.
- Chemical burns.
- Radiation burn.
- Pathophysiology of burn shock.
- Nutrition in burns.
- Facial burns.
- Tangenital excision and sequential excision.
- Reconstruction of burn hand and upper extremity.
- Post burn contractures –treatment of sequelae.
- Burn wound infection, sepsis.
- Principles of planning in event of burn disaster.
- Organization of Burns Unit
- Principles of Skin Banking

General Principles

- History of Plastic Surgery (Direct 6 years course) and its broad scope at the present time.
- Anatomy and functions of skin.
- Split skin grafts and full thickness skin grafts, their take and
- Subsequent behaviour.
- Local skin flaps.
- Pedicled skin flaps and tubs.
- Unstable scar and scar contracture.
- Care of wounds, dressing, techniques and splints.
- Wound healing.
- Grafts fat, fascia, tendon, nerve, cartilage, bone.
- Infective skin gangrene.
- Hospital infections.
- Suture instruments.
- Surgical instruments.

- Implant materials used in Plastic Surgery (Direct 6 years course).
- Principles of genetics and general approach to the management of congenital malformations.
- Flaps-Fasciocutaneous muscle, musculocutaneous, congenital malformations.
- Local anaesthesia, nerve blocks, regional anaesthesia.
- Principles of anaesthesia for infants, adults, hypothermia, hypotensive anaesthesia.
- Tissue expansion.
- Keloid, hypertrophic scans.
- Endoscopy in Plastic Surgery

Management of and relationships with the Plastic Surgery (Direct 6 years course) outpatient and inpatient

- Principles of Reconstructive Surgery
- Principles of Aesthetic Surgery
- Management of Acute Trauma
- Malignant Skin Tumours
- Benign Skin Conditions
- Administration
- Basic sub-specialty training in:
- i. Burns
- ii. Paediatric Plastic Surgery
- iii. Head & Neck Tumours
- iv. Hand Surgery
- v. Burn
- vi. Head and Neck Tumours
- vii. Cleft Lip and Palate
- viii. Reconstruction of Genitalia
- ix. Oculoplastic Surgery
- x. Limb Trauma
- xi. Aesthetic Surgery
- xii. Acute and Chronic Wound care with special emphasis on Diabetic Foot Care
- xiii. Oncoplastic Breast Surgery
- Biostatistics, Research Methodology and Clinical Epidemiology
- Ethics
- Medico legal aspects relevant to the discipline
- Health Policy issues as may be applicable to the discipline

IV. COMPETENCIES

- Acquisition of basic surgical skills in instrument and tissue handling.
- Incision of skin and subcutaneous tissue: Ability to incise superficial tissues accurately with suitable instruments.
- Closure of skin and subcutaneous tissue: Ability to close superficial tissues accurately.
- Knot tying: Ability to tie secure knots.
- Haemostasis: Ability to achieve haemostasis of superficial vessels.
- Tissue retraction: Use of suitable methods of retraction.
- Use of drains: Knowledge of when to use a drain and which to choose.
- Tissue handling: Ability to handle tissues gently with appropriate instruments.
- Skill as assistant: Ability to assist helpfully, even when the operation is not familiar
- The DNB resident should do the dressings of the patient that have been operated/assisted by them and of patients in Burns ICU.
- The DNB resident should note down the History and examination of admitted patients and should daily put progress notes in files.
- The normal working hours will be from 8.00 AM to 8.00 PM. When on emergency duty, the resident is supposed to stay overnight in the resident room.
- The DNB resident is to get one day off every week

Knowledge & Clinical Skills

1. Incision of skin and subcutaneous tissue:

- Langer's lines
- Healing mechanism
- Choice of instrument
- Safe practice
- Basic Surgical Skills course
- Closure of skin and subcutaneous tissue:
- Options for closure
- Suture and needle choice
- Safe practice
- Ability to use scalpel, diathermy and scissors
- Closure of skin and subcutaneous tissue:
- Accurate and tension free apposition of wound edges

2. Knot tying

- Single handed
- Double handed
- Superficial
- Deep
- Instrument

3. Choice of material

4. Haemostasis:

- Techniques
- Tissue retraction:
- Choice of instruments
- Use of drains:
- Indications
- Types
- Management/removal
- Tissue handling
- Choice of instruments
- Control of bleeding vessel (superficial)
- Diathermy
- Suture ligation
- Tie ligation
- Clip application
- Tissue retraction:
- Tissue forceps
- Placement of wound retractors
- Use of drains:
- Insertion
- Fixation
- Removal

Clinical Skills

- An understanding of burns assessment and resuscitation
- An understanding of burn wound excision and grafting

- An understanding of burn wound dressings
- An awareness of the roles of nursing staff, physiotherapists and occupational therapists in rehabilitation
- Wound care both acute and chronic and techniques for cover.
- Basics of Skeletal fixation of fractures. (needed for both facial fractures and hand fractures)
- Ability to assess major trauma
- Ability to debride an infected wound or a dirty wound
- Ability to plan and execute soft tissue cover for defects got due to trauma, infection and cancer

Practical

History, examination and writing of records:

- History taking should include the back ground information, presenting complaints and history of present illness, history of previous illness, family history, social and occupational history and treatment history.
- Detailed physical examination should include general examination and systemic examination (Chest, Cardio-vascular system, Abdomen, Central nervous system, locomotor system and joints), with detailed examination of the abdomen.
- Skills in writing up notes, maintaining problem oriented records, progress notes, and presentation of cases during ward rounds, planning investigations and making a treatment plan should be taught.

Bedside procedures & Investigations

- Therapeutic skills: Venepuncture and establishment of vascular access,
- Administration of fluids, blood, blood components and parenteral nutrition,
- Nasogastric feeding, Urethral catheterization, Administration of oxygen,
- Cardiopulmonary resuscitation, Endotracheal intubation.

Clinical Teaching

• General, Physical and specific examinations of Maxillofacial & Hand Injuries should be mastered. The resident should able to analyse history and correlate it with clinical findings. He should be well versed with all radiological procedures like CT Angio, CT Face with 3D Reconstruction and X-Ray of face. He should present his daily admissions in morning report and try to improve management skills, fluid balance, and choice of drugs. He should clinically analyse the patient & decide for pertinent Investigations required for specific patient.

Teaching Programme

- General Principles
- Acquisition of practical competencies being the keystone of postgraduate medical education, postgraduate training is skills oriented.
- Learning in postgraduate program is essentially self-directed and primarily emanating from clinical and academic work. The formal sessions are merely meant to supplement this core effort.

Teaching Sessions

- The teaching methodology consists of bedside discussions, ward rounds, case
 presentations, clinical grand rounds, statistical meetings, journal club, lectures
 and seminars. Along with these activities, trainees should take part in interdepartmental meetings i.e clinico-pathological and clinico-radiological meetings
 that are organized regularly.
- Trainees are expected to be fully conversant with the use of computers and be able to use databases like the Medline, Pubmed etc.
- They should be familiar with concept of evidence based medicine and the use of guidelines available for managing various diseases.

Teaching Schedule

- Following is the suggested weekly teaching programme in the Department of Plastic Surgery (Direct 6 years course):
 - 1. Seminar once a week
 - 2. Journal club once a week
 - 3. Case Presentation once a week
 - 4. File Audit/Stat Meet once month
 - 5. Grand Round/Interdepartmental Meet once a month
- Each unit should have regular teaching rounds for residents posted in that unit.
- Then rounds should include bedside case discussions, file rounds (documentation of case history and examination, progress notes, round

- discussions, investigations and management plan), interesting and difficult case unit discussions.
- Central hospital teaching sessions will be conducted regularly and MCh residents would present interesting cases, seminars and take part in clinico- pathological case discussions.

Conferences and Papers

- A resident must attend at least one conference per year.
- One paper must be presented in at least 3 years.

POSTING

1st year (12 + 3 months)

- First 3 months to be spent in the parent Plastic surgical unit to know the basics of plastic surgery
- Next 12 months to be spent in General Surgery to learn the basics of surgery

2nd year (9 months)

- To undergo Peripheral superspeciality postings
- 1 month in Surgical oncology
- 1 month in Paediatric surgery
- 1 month in Neurosurgery
- 1 month in Gastro Intestinal Surgery
- 1 month in Vascular Surgery
- 1 month in Cardiothoracic Surgery
- 1 month in Anaesthesiology & Intensive Care
- 1 month in Orthopaedics
- 1 month in Dermatology

3rd year (Back to parent plastic surgical unit)

 Basics / Basic Plastic Surgery theory, assisting in major plastic surgery procedures with assistants

4th Year

 To do Basic Plastic Surgery Procedures independently and assist major Plastic surgical procedures

5th Year

- To go to peripheral postings (To other plastic Surgical units in India or abroad. Two or 3 months as agreed by the parent unit academic supervisor)
- To assist major plastic surgical procedures and do basic procedures

6th year

• To do major Plastic Surgical procedures under supervision

Schedule of Posting

OPD: Twice a week

OT: Twice a week

• Emergency: Twice a week

Rotation of DNB Candidates in Other institutions

No single unit in the country can boast to be good in all aspects of the wide gamut of Plastic Surgery (Direct 6 years course) as the branch of Plastic Surgery is very wide. In addition it is beneficial to observe the working patterns and learn different techniques used by various stalwarts of this speciality. Hence DNB candidates must be rotated in other units in the country/abroad. The DNB candidate should get a letter from his/her DNB supervisor permitting them to visit the institutions of their choice. The DNB candidates must maintain a log book regarding what they learnt and observed in the institutions that they visit. At the end of the visit to each centre, they should get their logbooks attested by the head of the plastic surgical programme that they visit.

Period: 2 months mandatory, and 3 months upper limit. Location:

- It can be to institutions having an approved DNB/MCh Plastic surgical
- programme in India.

- Under exceptional circumstances a non teaching institution in India can be accepted provided the DNB supervisor agrees and vouches for the quality of work of the chosen institution.
- DNB candidates can observe and train under surgeons/institutions abroad provided the DNB supervisor agrees and vouches for the quality of work of the chosen institution

Job Responsibilities

Outdoor Patient (OPD) Responsibilities

- The working of the residents in the OPD should be fully supervised.
- They should evaluate each patient and write the observations on the OPD card with date and signature.
- Investigations should be ordered as and when necessary using prescribed forms.
- Residents should discuss all the cases with the consultant and formulate a management plan.
- Patient requiring admission according to resident's assessment should be shown to the consultant on duty.
- Patient requiring immediate medical attention should be sent to the casualty services with details of the clinical problem clearly written on the card.
- Patient should be clearly explained as to the nature of the illness, the treatment advice and the investigations to be done.
- Resident should specify the date and time when the patient has to return for follow up.

In-Patient Responsibilities

- Each resident should be responsible and accountable for all the patients admitted under his care. The following are the general guidelines for the functioning of the residents in the ward:
- Detailed work up of the case and case sheet maintenance:
- The trainee should record a proper history and document the various symptoms.
- Perform a proper patient examination using standard methodology.
- He should develop skills to ensure patient comfort/consent for examination. Based on the above evaluation the trainee should be able to formulate a differential diagnosis and prepare a management plan.

- Should develop skills for recording of medical notes, investigations and be able to properly document the consultant round notes.
- To organize his/her investigations and ensure collection of reports.
- Bedside procedures for therapeutic or diagnostic purpose.
- Presentation of a precise and comprehensive overview of the patient in clinical rounds to facilitate discussion with senior residents and consultants.
- To evaluate the patient twice daily (and more frequently if necessary) and maintain a progress report in the case file.
- To establish rapport with the patient for communication regarding the nature of illness and further plan management.
- To write instructions about patient's treatment clearly in the instruction book along with time, date and the bed number with legible signature of the resident.
- All treatment alterations should be done by the residents with the advice of the concerned consultants and senior residents of the unit.

Admission day

- Following guidelines should be observed by the resident during admission day.
- Resident should work up the patient in detail and be ready with the preliminary necessary investigations reports for the evening discussion with the consultant on duty.
- After the evening round the resident should make changes in the treatment and plan out the investigations for the next day in advance.

Doctor on Duty

- Duty days for each Resident should be allotted according to the duty roster.
- The resident on duty for the day should know about all sick patients in the wards and relevant problems of all other patients, so that he could face an emergency situation effectively.
- In the morning, detailed over (written and verbal) should be given to the next resident on duty. This practice should be rigidly observed.
- If a patient is critically ill, discussion about management should be done with the consultant at any time.
- The doctor on duty should be available in the ward throughout the duty hours.

Care of Sick Patients

- Care of sick patients in the ward should have precedence over all other routine work for the doctor on duty.
- Patients in critical condition should be meticulously monitored and records maintained. If patient merits ICU care then it must be discussed with the senior residents and consultants for transfer to ICU.
- Resuscitation skills
- At the time of joining the residency programme, the resuscitation skills should be demonstrated to the residents and practical training provided at various work stations.
- Residents should be fully competent in providing basic and advanced cardiac life support.
- They should be fully aware of all advanced cardiac support algorithms and be aware of the use of common resuscitative drugs and equipment like defibrillators and external cardiac pacemakers.
- The resident should be able to lead a cardiac arrest management team.
- Discharge of the Patient
- Patient should be informed about his/her discharge one day in advance and discharge cards should be prepared 1 day prior to the planned discharge.
- The discharge card should include the salient points in history and examination, complete diagnosis, important management decisions, hospital course and procedures done during hospital stay and the final advice to the patient.
- Consultants and DM Residents should check the particulars of the discharge card and counter sign it.
- Patient should be briefed regarding the date, time and location of OPD for the follow up visit.

In Case of Death

- In case it is anticipated that a particular patient is in a serious condition, relatives should be informed about the critical condition of the patient beforehand.
- Residents should be expected to develop appropriate skills for breaking bad news and bereavements.
- Follow up death summary should be written in the file and face sheet notes must be filled up and the sister in charge should be requested to send the body to the mortuary with respect and dignity from where the patient's relatives can handed over the body.

- In case of a medico legal case, death certificate has to be prepared in triplicate and the body handed over to the mortuary and the local police authorities should be informed.
- Autopsy should be attempted for all patients who have died in the hospital especially if the patient died of an undiagnosed illness.

Bedside Procedures

- The following guidelines should be observed strictly:
- Be aware of the indications and contraindications for the procedure and record it in the case sheet. Rule out contraindications like low platelet count, prolonged prothrombin time, etc.
- Plan the procedure during routine working hours, unless it is an emergency.
- Explain the procedure with its complications to the patient and his/her relative and obtain written informed consent on a proper form. Perform the procedure under strict aseptic precautions using standard techniques. Emergency tray should be ready during the procedure.
- Make a brief note on the case sheet with the date, time, nature of the procedure and immediate complications, if any.
- Monitor the patient and watch for complications(s).

OT responsibilities

- The 1st year resident observes the general layout and working of the OT, understands the importance of maintaining sanctity of the OT, scrubbing, working and sterilization of all the OT Instruments. The trainee is to assist seniors while operating as well as work as a junior surgical trainee in general surgery.
- The 2nd year DNB resident is posted in various super specialities and he should observe their work and assist the senior surgeons. The trainee should also actively take part in the academic activities of the respective departments
- The 3rd year DNB resident is to assist his/ her seniors for plastic surgical procedures
- The 4th year DNB resident should be able to do minor plastic surgical procedures independently and assist seniors for major surgeries.
- The 5th year DNB resident should be able to do minor plastic surgical procedures and some major surgical procedures with the assistance of his/her seniors
- The final year resident should be able to perform minor/medium/major surgeries independently and assist in medium/major/extra major surgeries. The trainee

 should be able to handle all emergencies and post op complications independently and is responsible for supervision and guidance of his/her juniors.

Medico-Legal Responsibilities of the Residents

- All the residents are given education regarding medico-legal responsibilities at the time of admission in a short workshop.
- They must be aware of the formalities and steps involved in making the correct death certificates, mortuary slips, medico-legal entries, requisition for autopsy
- They should be fully aware of the ethical angle of their responsibilities and should learn how to take legally valid consent for different hospital procedures & therapies.
- They should ensure confidentiality at every stage

V. LOG BOOK

A candidate shall maintain a log book of operations (assisted / performed) during the training period, certified by the concerned post graduate teacher / Head of the department / senior consultant.

This log book shall be made available to the board of examiners for their perusal at the time of the final examination.

The log book should show evidence that the before mentioned subjects were covered (with dates and the name of teacher(s) The candidate will maintain the record of all academic activities undertaken by him/her in log book.

- 1. Personal profile of the candidate
- 2. Educational qualification/Professional data
- 3. Record of case histories
- 4. Procedures learnt
- 5. Record of case Demonstration/Presentations
- 6. Every candidate, at the time of practical examination, will be required to produce performance record (log book) containing details of the work done by him/her during the entire period of training as per requirements of the log book. It should be duly certified by the supervisor as work done by the candidate and countersigned by the administrative Head of the Institution.
- 7. In the absence of production of log book, the result will not be declared.

VI. RECOMMENDED TEXT BOOKS AND JOURNALS

Suggested Books

- Grabb & Smith: Plastic Surgery 7th Edition
- Neligan P. Ed Plastic Surgery 6 Volume set 4th Edition, 2017.
- Mc Gregor: Fundamental techniques of Plastic Surgery
- Diego Marre. Fundamental Topics in Plastic Surgery
- Plastic and Reconstructive Surgery Ed. Karoon Agrawal
- Green's: Operative Hand surgery
- Grab's: Encyclopedia of flaps
- Flaps and Reconstructive Surgery Wei and Mardini. 2nd ed
- Paediatric Burns-Total Management of the Burned Child by Marella L Hanumadass and K Mathangi Ramakrishnan
- Total Burn Care David Herndon. 4th Ed.
- Mc Carthy: Current therapy in Plastic Surgery
- Practice Manual of Microvascular Surgery Acland RD and Sabapathy SR
- Maxillofacial Surgery Peter Ward Booth, 2 vol set. 2nd ed.

Suggested Journals

- Indian Journal of Plastic Surgery
- Plastic and Reconstructive Surgery
- Journal of Plastic Reconstructive and Aesthetic Surgery
- Burns
- Clinics in Plastic Surgery
- Hand Clinics
- Journal of Hand Surgery (am)
- Aesthetic Surgery Journal



आयुर्विज्ञान में राष्ट्रीय परीक्षा बोर्ड

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