

IAAPS recommended Aesthetic Surgery Syllabus

The primary purpose of training in Cosmetic / Aesthetic surgery is to become competent in the management of Aesthetics. Training in Aesthetic surgery needs to be an integral part of the overall training programme in Plastic surgery. Many of the clinical and technical skills attained from Reconstructive surgery training which is the norm in all teaching Dept in the country are extremely pertinent and useful in Aesthetic surgery practice of the same anatomical areas.

Training Modules:

1. Aesthetic Surgery of the Breasts
2. Aesthetic Surgery of Face, Neck and Periorbital Areas
3. Rhinoplasty and Otoplasty
4. Body contouring and Liposuction of the Torso and Limbs
5. Hair restoration
6. Non-surgical rejuvenation
7. Genital Cosmetic Surgery
8. Aesthetic surgery Practice

Module 1: Aesthetic Surgery of the Breasts

TRAINING OBJECTIVES:

- To acquire competence in the diagnosis, assessment / analysis and safe management of all deformities and conformations of the breasts, developmental and acquired, pathological and physiological.
- To acquire basic knowledge for the psychological assessment of patients presenting for aesthetic breast surgery.

Knowledge (Theory)

BASIC LEVEL (1st year):

Should be able to demonstrate knowledge of

- Applied and Surgical anatomy of the breast, its blood supply, nerve supply and function,
- Breast physiology in pregnancy and lactation,
- Development of the breast, all congenital deformities and variations of breast form and of associated structures (nipple areola complex),
- Multiple common Benign pathologies of the breast,
- Planning aesthetic incisions on the breast and the nipple areola complex.
- Closure and management of breast wounds,
- anatomy of the axilla and axillary tail of Spence (axillary breast)
- Psychology of self-image in relation to breast size, shape and proportion social and sexual dimensions and pathology of a deranged self-image.
- clinical photography for accurate assessment of the patient

INTERMEDIATE LEVEL (2nd year):

Should be able to demonstrate knowledge of

- The issues surrounding breast size and its assessment.
- Types, content, structure, physical and biological properties of different breast implants available and their selection / application,
- Various designs and approaches to breast augmentation, incisions and planes of insertion and their applications.
- Post-operative management of Breast Implant patients

- Avoidance of and management of common Implant sequelae
- Microbiology, implications and management of Implant infection,
- Nature, physiology and behaviour of Breast implant capsules and management of capsular contractures.
- Pathology, detection and management of Breast Implant Associated Acute Large Cell Lymphoma (BIA-ALCL)
- Other complications of breast augmentation and their management.
- Various designs and patterns of Breast Reduction, their pros and cons including basic knowledge of historical techniques
- Liposuction for Breast reduction
- Technique of Amputation with Free Nipple Graft for Gigantomastia
- Analysis of a patient for Breast ptosis and principles of Mastopexy and Augpexy
- Complications of breast reduction / reshaping / mastopexy and their management.
- Fundamentals of the science of Fat Grafting to the Breast
- Presentation, Hormonal profiles and investigations, management and complications of Gynaecomastia.
- Presentation, investigations and modes of management of Axillary tail of Spence (Axillary breast)

ADVANCED (3rd year):

Should be able to demonstrate knowledge of

- Assessment of Skin envelope and Volume in relation to Breast Asymmetry, both developmental and acquired,
- Classification and management pathways of the Tuberous breast,
- Management and available treatment choices in breast asymmetry,
- Effect of ageing and pregnancy on breast asymmetry correction,
- Management of conditions of the nipple areola complex, including Inverted Nipple
- Features of Body Dysmorphic Disorder and psychosexual dimensions related to aesthetic breast surgery.
- Symptoms, Causes and Diagnosis of Breast Implant Illness (BII)

Clinical and Technical Skills

BASIC (1st year):

Should demonstrate ability to

- Take a targeted and specific breast history,
- Perform a thorough patient examination including breast examination with reference to aesthetic considerations.

Should be able to perform minor Aesthetic Breast Procedures

- Planning, execution and closure of incisions on the breast with reference to aesthetic principles and sub-units.
- Designing and executing excision of skin lesions of the breast,
- Undertaking an aesthetic approach to removal of benign lesions of the breast,
- Scar revisions in aesthetic breast surgery

INTERMEDIATE (2nd Year):

Demonstrate knowledge of the management algorithms for the procedures covered earlier in the knowledge section including investigations.

Should be able to perform

- Correction of the Inverted Nipple (by various techniques),
- Bilateral breast augmentation by various incisions, in various planes,
- Wise pattern Inferior Pedicle breast reduction under supervision,
- Mastopexy using periareolar pattern under supervision,
- Primary Correction of Gynaecomastia, incorporating various forms of liposuction in combination with excision as appropriate.
- Procedures for Axillary Breast, both by liposuction and open excision, with placement of incisions and after care.

ADVANCED (3rd year):

Should be able to

- Demonstrate advanced competence in skills of analysis, diagnosis and surgical planning,

- Assess and accurately record aesthetic concerns about the breast,
- formulate complete management plans in relation to aesthetic interventions,
- clearly explain, consent and counsel potential patients for aesthetic breast surgery,
- assess the psychological suitability of a patient for aesthetic breast surgery and appropriately refer for expert psychological advice as necessary,
- deal with disappointment and postoperative dissatisfaction

Should be able to perform

- Correction of Developmental and Acquired Breast Asymmetries under supervision
- Revision surgeries of Breast augmentation
- Assist in tackling complications including capsular contractures, perform explantation with capsulotomies / capsulectomies
- Vertical scar Breast reductions under supervision
- Liposuction for Breast reduction
- Technique of Free Nipple graft in selected cases
- Mastopexy using periareolar, vertical and Wise patterns
- Assist in Augmentation Mastopexies using periareolar, vertical and Wise patterns,
- Secondary Correction of Gynaecomastia including fat grafting for post-surgical deformities
- Assist in Autologous Fat Grafting to the Breast

Module 2: Aesthetic Surgery of Face, Neck and Peri-orbital Areas

TRAINING OBJECTIVES:

- To acquire competence in the diagnosis, aesthetic assessment, planning and safe management of all patients presenting for reversal of the features of physiological aging of the face, brow, neck and peri-orbital areas.

Knowledge (Theory)

BASIC (1st year):

Should be able to demonstrate knowledge of

- normal facial, neck and peri-orbital anatomy, its common variants, including a clear understanding of
 - the blood supply, sensory and motor innervation, facial musculature and the course and distribution of the facial nerve,
 - the SMAS and fascial planes of the face and the brow, the pattern of fascial compartments and ligamentary attachments of the brow, face, neck and peri-orbital area
 - fat compartments in the face
- cosmetic units of the face, assessment of facial proportions, symmetry and deviations from the same.
- pattern of relaxed skin tension lines (RSTL) over the whole body,
- biology of scars, hypertrophic scars and keloids
- basic principles of surgical and non-surgical management of scars
- psychology behind the desire for antiaging treatment,
- warning signs denoting high-risk groups of patients that may present for facial rejuvenation
- clinical photography for accurate assessment of the patient

INTERMEDIATE (2nd year):

Should be able to demonstrate knowledge of

- basic techniques of surgical scar revision by re-orientation along RSTLs
- Clinical analysis of the face, accurate assessment, and analysis of the pattern of facial aging,

- Forehead and brow analysis - position, symmetry, movement, dynamic vs static rhytids
- indications for, and design of, direct, endoscopic and open browlift and temporal browpexies
- fixation methods in brow lift, including use of endotines
- types of foreheadplasties, including coronal and hairline
- designs and variations of blepharoplasty, upper and lower, approaches and incisions
- Principles of using various types of threads including barbed freefloating and anchored threads.
- Principles of endotines for brow, forehead, cheeks and neck
- indications and contraindications for facelift,
 - anatomy of the SMAS layer and how it may be modified,
 - facial fat pads and how they change with time,
 - variation of designs for facelift incisions,
 - different described methods of facelifts
 - Short scar techniques
 - SMAS plications
 - Lateral SMASectomy
 - Extended high SMAS
 - Deep Plane
 - Subperiosteal
- different described methods of necklifts, anterior and lateral platysmaplasties
- role of submental lipectomy and liposuction
- basic biology and science of fat transfer to the face

ADVANCED (3rd year):

Should be able to demonstrate knowledge of

- techniques of regional anaesthesia for different areas of the face
- browlifting and forehead rejuvenation techniques
- techniques of transbleph brow fixations and corrugator resections
- applications, indications, limitations and complications of upper and lower blepharoplasty alone and in combination with other techniques.
- more advanced methods of facelifts

- Lateral SMASectomy
- Extended high SMAS
- Deep Plane
- Subperiosteal

- Mid-face lifts
- treatment of the submandibular gland and digastrics in the neck
- role of subplatysmal fat resection
- management of complications of facial rejuvenation surgery.
- advanced biology and science of microfat and nanofat in the face
- alloplastic implants in the face – chin, malar, angle of jaw
- principles of Creation of cheek and chin dimples

Clinical and Technical Skills

BASIC (1st year):

Should demonstrate ability to

- take detailed history to include features relevant to the assessment and management of the aesthetic features of the face, neck and peri-orbital areas,
- thoroughly examine the patient to include relevant aesthetic features in the same areas.
- record accurate assessment of the pattern of symptoms and physical features.

Should be able to perform

- planning, designing and performing excision of minor facial skin lesions for aesthetic indications,
- upper lid blepharoplasty under supervision

INTERMEDIATE (2nd year):

Should be able to perform

- assessment and analysis of all the features of the aging eyelids
- demonstrate knowledge of the management algorithms, combinations and permutations of the rejuvenation procedures covered in this section including appropriate investigations,

Should be able to perform

- surgical thread-lifting including different types of barbed or cogged threads – both free floating and anchored.
- submental liposuction and lipectomy,
- liposuction and contouring for the lower face
- . Assist in various types of Face-lift surgeries
- Assist in Lower eyelid blepharoplasties

ADVANCED (3rd year):

Should be able to

- demonstrate skills of diagnosis, analysis, judgement and surgical planning for facial rejuvenation surgery,
- prepare an overall management plan for a given patient,
- techniques of regional anaesthesia of different facial zones
- assess the psychological suitability for rejuvenation surgery and appropriately refer for expert advice as necessary,
- counsel and consent a patient for rejuvenation intervention.
- define the subgroup of patients that can be managed by nonsurgical intervention, - recognise and counsel the unrealistic patient,
- deal with disappointment and postoperative dissatisfaction.

Should be able to perform

- local anesthetic blocks for cosmetic units of the face
- Lower lid blepharoplasty by external or transconjunctival approaches under supervision.
- Methods of prevention of sequelae in lower lid blepharoplasty, including techniques of canthopexy and canthoplasty
- Facelift with SMAS plication technique under supervision,
- MACS lift under supervision,
- Assist in Facelift by SMAS lifting and excision techniques
- Transbleph Midface lift under supervision
- Submental Anterior platysmaplasty
- Autologous fat grafting to the face, both microfat for augmentation and nanofat for rejuvenation,

- Chin augmentation by use of implants.
- Creation of cheek dimples and chin dimples/clefts
- Assist in malar augmentation with implants

Module 3: Rhinoplasty and Otoplasty

TRAINING OBJECTIVE

Competence in the diagnosis, planning and management of all aspects of aesthetic nasal and aesthetic ear surgery.

Knowledge (Theory) – Rhinoplasty

BASIC (1st year):

Should demonstrate knowledge of

- Anatomy of the nose including detailed description of the osteocartilagenous skeleton, soft tissue structures, septum and aesthetic units
- Blood supply and nerve supply of the nose
- physiological functions of the nose, nasal passages, internal valve and how these may be affected by nasal surgery,
- local anaesthesia and the use of topical agents
- facial aesthetics including the psychological implications of rhinoplasty surgery,
- presence of BDD and its clinical features,

INTERMEDIATE: Should demonstrate knowledge of

- techniques of endonasal and open approaches, including appropriate selection of surgical technique,
- techniques to manage the nasal dorsum including dorsal hump reduction and correction of open roof deformity
- techniques of dorsal augmentation using autologous and alloplastic material,
- management of septal trauma
- anatomy of the cleft nasal deformity

ADVANCED: Should demonstrate knowledge of

- advanced manoeuvres in primary rhinoplasty
- different osteotomy techniques including placement of osteotomies,

- management of the scroll area and internal valve
- management of the alar cartilages including cephalic resection or infolding, dome suturing technique,
- cartilage grafting techniques such as alar extension grafts shield grafts, columellar strut or septal extension grafts,
- management of the septum in cases of deviation, functional obstruction and harvest of cartilage grafts
- techniques for nasal tip adjustment including resection, suturing, control of projection
- techniques for modification of the alar base and nostril sill,
- complications in rhinoplasty surgery including functional complications,
- secondary rhinoplasty techniques with indications for same.
- principles of approach to the upper septum for correction of high deviations

Clinical and Technical Skills (Rhinoplasty)

BASIC (1st year):

Should demonstrate ability to

- elicit a pertinent and precise history in respect of the rhinoplasty patient,
- arrange appropriate views for clinical photographic record,
- examine patient thoroughly including preoperative analysis of appearance and function,
- recognise the need for psychological assessment and identify BDD.

Should be able to perform

- application of internal and external nasal splints,
- harvesting cartilage graft from ear and costochondral junction,
- nasal packing for bleeding
- infiltrating nose with local anaesthetic and administer topical agents,

INTERMEDIATE (2nd year) : Should demonstrate ability to

- clinically assess and analyse nasal defects including issues of balance and proportion.,
- make a surgical plan for primary rhinoplasty
- counsel and consent patient for rhinoplasty surgery,

- recognise and counsel the unrealistic patient,

Should demonstrate ability to perform

- initial endonasal and open approaches to expose the osteocartilagenous skeleton
- closed approach to the septum without concomitant rhinoplasty
- cartilage graft harvest from nasal septum,
- harvest of temporalis fascia, fascia lata for wrapping diced cartilage grafts
- adjustment of nasal dorsum including dorsal hump reduction and dorsal augmentation.
- drainage of septal haematoma

ADVANCED: Should demonstrate ability to

- examine the patient with reference to the nose including complete preoperative analysis of appearance and function,

- deal with disappointment and postoperative dissatisfaction.

- deal with postoperative complications,

Should demonstrate ability to perform

- a comprehensive primary rhinoplasty under supervision

- augmentation of the dorsum with autologous tissue, alloplastic implants and fillers

- different osteotomy techniques including placement of osteotomies,

- management of the scroll area and internal valve

- management of the alar cartilages including cephalic resection or infolding, dome suturing technique,

- cartilage grafting techniques such as alar extension grafts shield grafts, columellar strut or septal extension grafts,

- management of the septum in cases of deviation, functional obstruction and harvest of cartilage grafts

- techniques for nasal tip adjustment including resection, suturing, control of projection,

- alar base and nostril sill reduction under supervision

- correction of the cleft nasal deformity, including handling of vestibular web.

Knowledge (Theory) - Otoplasty

BASIC (1st year):

Should demonstrate knowledge of

- Anatomy of the ear including embryology and growth
- Blood supply and nerve supply of the ear

INTERMEDIATE (2nd year):

Should demonstrate knowledge of

- age-related protocols with respect to timing of otoplasty.
- non-surgical management techniques including neonatal moulding techniques,
- the use of local anaesthesia and appropriate infiltration/blocks,
- Classification of prominent ears and Definitions of common congenital anomalies,
- Surgical techniques for prominent ear correction
- Various post-op dressing techniques with their relative merits,
- Potential complications of prominent ear correction and risk factors for the same.

ADVANCED (3rd year): Should demonstrate knowledge of

- Reconstructive techniques available for treatment of complications following otoplasty surgery

Clinical and Technical Skills (Otoplasty)

BASIC (1st year):

Should demonstrate ability to

- effectively communicate and clinically assess the paediatric patient
- clinically assess the adult patient
- arrange appropriate views for clinical photographic record,
- take age-appropriate consent for primary otoplasty
- recognise the need for psychological assessment and identify BDD.

- counsel and consent patient for otoplasty surgery,
- recognise and counsel the unrealistic patient,

Should be able to perform

- Infiltration around the ears with local anaesthesia including greater auricular nerve blocks,
- Post-op proper application of prominent ear head dressing.

INTERMEDIATE (2nd year):

Should demonstrate ability to

- clinically assess and analyse ear deformities for symmetry and proportion,
- make a surgical plan for primary otoplasty

ADVANCED (3rd year):

Should demonstrate ability to

- deal with postoperative complications, disappointment, and postoperative dissatisfaction.

Should demonstrate ability to perform

- a primary otoplasty with cartilage scoring techniques under supervision,
- a primary otoplasty with suture-only techniques under supervision.

Module 4: Body contouring and Liposuction of the Torso and Limbs

TRAINING OBJECTIVES

Acquire competence in the assessment, planning, correction and management of all aspects of body lifting and body contouring by liposuction alone and by skin-fat excision techniques.

Knowledge (Theory)

BASIC (1st year):

Should demonstrate knowledge of

- Anatomy of the Skin and subcutaneous tissue, musculature and specific areas of fat deposits
- Blood and nerve supply of the relevant regions of the skin in the torso and upper/lower limbs,
- Anatomy of recuts divarications, peri-umbilical and umbilical hernias, incisional hernias
- pattern of relaxed skin tension lines (RSTL) over the whole body,
- biology of fat, science of adipose derived stem cells and stromal vascular factor
- Body Mass Index calculations and gradations of weight / obesity
- pathogenesis of thromboembolic disease, prophylaxis and management of these disorders,
- selection of appropriate prophylactic antibiotics.

INTERMEDIATE (2nd year):

Should demonstrate knowledge of

- the basic principles of bariatric surgery and its metabolic consequences,
- patient suitability for body contouring versus bariatric surgery,
- appropriate placement of incisions for best aesthetic outcome,
- principles of liposuction and of the different available modalities / devices like power-assisted, ultrasonic-assisted, laser-assisted, water-jet assisted with their relative risks and benefits,
- principles and composition of wetting solutions, grades of infiltration,
- use of tumescence in liposuction, pharmacology of lignocaine, including safety issues and toxicity,

- counselling patients about postoperative changes in body weight & contours and the maintenance of results
- body contouring issues resulting from massive weight loss (MWL)
- pathology and basic principles of fat grafting.
- principles and patient selection for augmentation of the pectoral area , buttocks, biceps, calves by alloplastic implants

ADVANCED: Should demonstrate knowledge of

- common patterns of acquired skin excess in the torso and limbs,
- syndromic abnormalities of skin laxity and fat depositions,
- forms of lipodystrophy, its sites, patterns and presentations,
- specific complications of the various techniques of liposuction,
- principles of megaliposuction, safety issues and limitations, management protocols
- principles of lipo-contouring and hi- definition liposculpturing of specific areas such as the lower face, neck, arms, deltoids, buttocks, calves and ankles.
- complications of skin-fat excision surgery, including those following MWL
- principles of component separation techniques for ventral and incisional herniae
- principles, patient selection and techniques of lipoabdominoplasty, including extended and circumferential
- techniques of repair of rectus divarications, peri-umbilical and umbilical hernias, anatomical and with use of meshes (including pre-peritoneal placement)
- techniques, donor sites and instrumentation for fat grafting,
- Biology of macrofat, microfat and nanofat and their effects of volumetric augmentation versus skin rejuvenation
- ongoing research into trophic / non-volumetric effects of fat grafts.
- psychological issues such as BDD and its psychosexual impact.

Clinical and Technical Skills

BASIC (1st year):

Should demonstrate ability to

- take thorough history to include all issues relevant to the assessment and management of body contour problems,
- examine the patient with reference to patterns of fat deposition, skin excess and laxity and documentation of symptomatically displeasing body contours.
- arrange appropriate views for clinical photographic record.
- counsel and consent patient for surgery.

Should be able to undertake

- dressing care and wound management,
- management of the necrotic wound,
- range of secondary wound closure techniques,
- application of Negative pressure wound therapy / Vacuum Assisted Closure dressings.
- Scar revisions and corrections of dog-ears
- Basic regional Liposuction and harvest of fat grafts

INTERMEDIATE (2nd year):

Should demonstrate ability to

- undertake complete and thorough clinical assessment for the perceived deformities covered in this section.
- convert into an appropriate plan for surgical intervention,
- recognise the patient seeking treatment of obesity by body contouring.
- recognise and counsel the unrealistic patient.
- identify and counsel the patient with BDD

Should be able to perform

- more extensive regional liposuction,
- a mini-abdominoplasty procedure
- fat graft harvest and preparation of fat grafts,
- local lipofilling with fat graft,
- post-op care of the skin-fat excision patient including body-lifts, with the inherent restrictions and precautions therein.

ADVANCED (3rd year):

Should demonstrate ability to

- make a surgical plan for the individual patient
- assess the psychological suitability for body contouring surgery and appropriately refer for psychological advice if necessary,
- counsel and consent a patient for a major body contouring surgery,
- communicate to the patient the potential secondary effects of a given procedure and suggest adjuvant procedures or alternate techniques,
- accurately assess local volume excess and translate that into a plan for liposuction,
- recognise lipodystrophies,
- recognise local fat deficiencies which will benefit from fat grafting,
- recognise and counsel the unrealistic patient,
- deal with disappointment and postoperative dissatisfaction.

Should be able to perform

- major liposuctions in all areas of the torso and limbs using SAL, PAL and UAL
- techniques, safety protocols and risks of lipo-contouring of specific areas such as the lower face, neck, arms, deltoids, buttocks, calves and ankles.
- various patterns of lipo-abdominoplasty under supervision,
 - correction of lax abdominal musculature and repair of divarications, peri-umbilical and umbilical hernia, including anatomical repairs as well as use of meshes in different planes
- component separation and repair of ventral and incisional herniae under supervision
- Management of umbilicus with various patterns and Neoumbilicoplasty
- conversion of macrofat to microfat to nanograft using various techniques
- fat grafting to the breast and buttocks with knowledge of international safeguards, under supervision
- fat grafting to the face under supervision
- techniques, safety protocol and risks in augmentation of the pectoral area , buttocks, biceps, calves by alloplastic implants
- assistance in arm-lift and thigh-lift procedures
- assistance in upper and lower body lift procedures
- assistance in hi-definition lipoplasty

Module 5: Hair restoration

TRAINING OBJECTIVES

- To acquire competence in the proper assessment and diagnosis of hair fall and pattern baldness and plan safe and effective medical and surgical management of all patients presenting for reversal of hair fall and correction of pattern baldness.

Knowledge (Theory)

BASIC (1st year): Should be able to demonstrate knowledge of

- Basics of trichology - Hair and Scalp Anatomy and Physiology, including growth cycles
- Androgenic Alopecia and other Types of Hair Loss
- Understanding patterned and nonpatterned hair loss
- Basic understanding of the factors related to hair fall / hair loss
- Common scalp diseases and their treatment
- Use of investigations such as TrichoScan, dermatometry / densitometry and video-microscopy for understanding hair density and quality of hair
- Basic consultation, examination and evaluation of a patient with hair fall
- Medical treatments, both oral and local applications for reduction of hair fall and hair restoration
- Principles and Techniques of hair restoration, both FUT and FUE
- Selecting cases for hair restoration by hair transplant and Pre-surgery diagnostic work-up

INTERMEDIATE (2nd Year): Should be able to demonstrate knowledge of

- Current status of the medical management protocols of hair fall
- Integrated medical and surgical treatment plans for hairlines and crowns in all Norwood grades of hair loss
- Detailed planning of pre-operative preparation, procedure and post-operative management
- Local anaesthesia techniques and safe dosage
- Donor harvesting by both strip technique and FUE, graft preparation and storage
- Slivering and cutting units from strips and harvesting using motorised punches
- Methods of recipient site preparation and insertion
- Post-operative care protocols
- Sequelae and complications in hair transplantation

ADVANCED (3rd year): Should be able to

- Counsel patients on detailed post-op care and manage their expectations
- Analysis and plan for best density in specific areas, plan a natural hairline design
- Plan harvest and insertion of beard and body hair
- Analysis and Planning of eyebrows, moustache and sideburns Transplantation
- Assess and plan hair restoration in female pattern hair loss
- Demonstrate knowledge of hair transplantation in scars, alopecia areata
- Plan and strategize Mega-sessions over 2 days
- Have knowledge of new molecules and new technologies
- Have knowledge of PRP, Dermaroller, Mesotherapy, Lasers, Light therapy

Clinical and Technical Skills

BASIC (1st year):

Should demonstrate ability to

- Assess hair loss and quality of hair by performing TrichoScan / Densitometry
- Calculate dosage of safe Local Anaesthesia for every individual case of hair transplant
- Safely sliver strips and cutting follicular units under magnification
- Store harvested grafts in cold saline and prepare holding solutions prior to insertion

INTERMEDIATE (2nd year):

Should demonstrate ability to

- Calculate and administer an appropriate dose of medication for sedation and local anaesthesia for hair replacement surgery, including the use of tumescent solution.
- Plan and Execute strip harvest in FUT, including trichophytic closure of incision
- Plan and use extractors and motorised punches in FUE technique

ADVANCED (3rd year):

Should be able to

- Plan and perform recipient site slit preparation and graft insertion manually or with implanters
- Perform beard and body hair harvesting
- Perform eyelashes, eyebrows, moustache, beard and sideburns transplantation
- Assist in mega session with composite FUT and FUE techniques
- Manage complications, systemic and local

Module 6: Non-surgical rejuvenation

TRAINING OBJECTIVES:

- To acquire competence in the diagnosis, aesthetic assessment, planning and safe non-surgical management of all patients presenting for reversal of the features of physiological aging of the face, brow, neck and peri-orbital areas.

Knowledge (Theory)

BASIC (1st year):

Should be able to demonstrate knowledge of

- anatomy and physiology of skin including classification of skin types,
- normal ageing changes of skin including changes related to sun exposure,
- normal facial, neck and peri-orbital anatomy, its common variants, including a clear understanding of
 - the blood supply, sensory and motor innervation, facial musculature and the course and distribution of the facial nerve,
 - the SMAS and fascial planes of the face and the brow, the pattern of fascial compartments and ligamentary attachments of the brow, face, neck and peri-orbital area
 - fat compartments in the face
- cosmetic units of the face,
- danger areas and planes for use of injectable fillers
- psychology behind the desire for antiaging treatment,
- warning signs denoting high-risk groups of patients that may present for facial rejuvenation
- range of products and techniques available for non-surgical rejuvenation,
- principles of dermabrasion and microdermabrasion for skin surface recontouring and rejuvenation
- the role of these techniques, the indications for use as sole techniques and as adjuncts to other surgical procedures.

INTERMEDIATE (2nd year):

Should be able to demonstrate knowledge of

- specific patterns of ageing in different parts of the body with emphasis on face, neck and hands,
- biology of scarring, congenital and acquired pigmentary changes (including post-inflammatory hyperpigmentation), acne scars and their modulation,
- principles and techniques of non-surgical management of scars and keloids by mechanical and chemical means or by energy-based devices
- principles and techniques of scar modulation by various modalities
- Biology of stretch marks and principles of management
- factors and conditions that may cause premature ageing including smoking and substance abuse,
- accurate assessment and analysis of the pattern of face aging,
- anatomy of the SMAS layer and how it may be modified,
- facial fat pads, facial compartments and how they change with time,
- knowledge of Skin care protocols – Daily, Pre-operative/pre-procedural, Post-operative
- formulation and application of chemical peeling agents specific to the face.
- Injectable fillers available, their chemical formulations, their physics, uses, contraindications and interactions, and the literature regarding outcomes of the same (permanent, semi-permanent and temporary fillers
- Biology and pharmacology of neurotoxin agents, the different formulations and the muscle groups to which they may be applied, dose schedules and how to achieve complete and partial temporary paralysis of selected muscle groups.
- role of fillers and neurotoxins in the overall patient management plan
- Role of PRP and mesotherapy in non-surgical skin rejuvenation
- laser physics, different types of lasers available for aesthetic enhancement, their potential applications, mechanism of action, treatment schedules and usage.
- Availability of other energy-based devices used to modify facial aging.
- Management of pigmentary disorders by use of cream programs or by use of lasers and energy based devices

Clinical and Technical Skills

BASIC (1st year): Should demonstrate ability to

- take detailed history to include features relevant to the assessment and management of the aesthetic features of the face, neck and peri-orbital areas,

- thoroughly examine the patient to include relevant aesthetic features in the same areas.
- define the subgroup of patients that can be managed by nonsurgical intervention

Should be able to perform

- selection and use of injectables for fine rhytids
- basic techniques of using neurotoxins to weaken aging muscle groups,

INTERMEDIATE (2nd year): Should be able to

- assess and analyse all the features of the aging eyelid
- demonstrate knowledge of the management algorithms, combinations and permutations of the rejuvenation procedures covered in this section including appropriate investigations,
- understand racial differences in skin type and the differences in response by skin type to the interventions described in this module,

Should be able to perform

- selection and use of various grades of injectable fillers for facial augmentation in safe areas,
- advanced techniques of using neurotoxins.

ADVANCED (3rd year): Should demonstrate knowledge of

- prepare an overall management plan for a given patient,
- assess effect of various laser/energy-based treatments on facial skin including mechanisms of healing of partial thickness and controlled injury in facial skin,
- assess the psychological suitability for rejuvenation surgery and appropriately refer for expert advice as necessary, counsel and consent a patient for rejuvenation intervention.
- complications of use of nonsurgical techniques including use of hydroxyquinones, botulinum toxin overuse, scarring from chemical peel, laser.
- deal with disappointment and postoperative dissatisfaction.

Should be able to perform

- pan or regional facial rejuvenation by laser resurfacing / chemical peel / dermabrasion under guidance
- advanced techniques of using injectable fillers in the face, including identification of danger areas, selection of correct planes and points for injection.

Module 7: Genital Cosmetic Surgery

TRAINING OBJECTIVES

- To acquire competence in the diagnosis, aesthetic assessment, planning and safe management of all patients presenting male and female genital cosmetic surgery

Knowledge (Theory)

BASIC (1st year): Should demonstrate knowledge of

- Anatomy of external male and female genitalia, including Embryology
- History taking from patient for concerns regarding the external male genitalia and vagina with respect to form and function
- Assessment of the male mons pubis, penis, scrotum and perineal areas
- Assessment of the female mons pubis, labia majora and minora, introitus and vaginal canal with respect to abnormalities of form, appearance and function.
- Patient counselling and consent for male and female genital cosmetic surgery

INTERMEDIATE (2nd year): Should demonstrate knowledge of

- Analysis and detailed planning of procedures in male and female genital cosmetic surgery.
- Non-surgical rejuvenation of the vagina with Lasers and EBD

ADVANCED (3rd year): Should demonstrate knowledge of

- Counselling and consent of patients for Penile procedures with explanation of risks and benefits
- Principles of Penile lengthening, girth augmentation and straightening procedures

Clinical & Technical Skills

BASIC (1st year): Should demonstrate knowledge of

- Clinical assessment of the mons pubis, labia majora and minora, introitus and vaginal canal with respect to abnormalities of form, appearance and function.

- Analysis and planning of procedures
- Patient counselling and consent
- Positioning, instrumentation, lighting, retraction, exposure in genital cosmetic surgery
- Anaesthetic techniques for penile and scrotal surgery
- Vaginal and vulvar anaesthetic techniques
- Basic penile and vaginal surgery perioperative care

Should be able to perform

- Mons pubis liposuction in both males and females
- Surgical reduction of labia minora
- Aesthetic Circumcision

INTERMEDIATE (2nd year):

Should have knowledge

- to prepare an overall management plan for a given patient,
- of complications following surgery
- to deal with disappointment and postoperative dissatisfaction.

Should be able to perform

- Scrotal web correction by flaps and Z-plasties
- Mon pubis tightening /lifting procedures
- Labia Majora liposuction
- Clitoral hood reduction
- Clitoral recession surgery
- Hymenoplasty

ADVANCED (3rd year):

Should be able to perform

- Penile lengthening procedures
- Penile girth augmentation by use of ADM, fat transfer
- Penile Straightening procedures
- Labia majora augmentation by fat grafting
- Vaginal tightening procedures

Module 8: Aesthetic Surgery practice

TRAINING OBJECTIVES

- To acquire skills in paraclinical work related to medical records keeping, medicolegal requirements of practice, patient relations and communication, informed consent, working with colleagues and seniors.

Knowledge (Theory) and Clinical Skills

BASIC (1st year):

Should be able to demonstrate the ability to

- Elicit proper history from patient including family history, drug history, previous procedures, co-morbid conditions, allergies
- Assemble, store and digitally back-up medical records related to each patient, in a format suitable for easy retrieval for audit and research,
- Know the Essentials of medical photography, including basic photographic views, lighting, camera settings, backgrounds and local digital storage of the same
- To check all required investigations related to the planned procedure including viral markers, specific tests related to co-morbidities, references to specialists as necessary and anaesthetic evaluation prior to the procedure.
- Undertake Basic communications with patients and their relatives at the time of consultation, pre-surgery and post-operative phases
- Draft a detailed and specific written consent from patient AND relative / kin, related to each planned procedure.
- To take care of instruments and machinery including their regular maintenance and sterilization
- Collate a detailed discharge summary with appropriate prescriptions, advice and follow-up instructions

INTERMEDIATE (2nd year)

Should be able to demonstrate the ability to

- Undertake a detailed consultation including history taking and examination of the patient for general and region-specific anatomy, deviations and patient concerns and record the same

- Preliminary assessment of patient's psychological status in general and specifically in relation to the procedure
- Store digital medical records as per protocol
- Advanced techniques of medical photographs including manual settings, specialized views and cloud storage of the same
- Confirm all investigations and specialist references for evaluations prior to surgery and any references peri-operatively and post-operatively
- Undertake regular communications with patients and their relatives, keeping them informed and upto date on the treatment plan and progress, pre-operatively, peri-operatively and post-operatively till discharge
- Communicate with patient regarding follow-ups with clear instructions and prescriptions as necessary
- To know all the caveats in medical consent and explain the details of the informed and specific consent to patient and relatives / kin in a language they can understand, explaining the risks and benefits, alternatives and possible complications.
- Perform accurate and correct site markings prior to surgery and have them verified by patient and relatives
- To collaborate with other specialties for references and for assistance in procedures or peri-operative care

ADVANCED (3rd year)

Should be able to

- Supervise the overall conduct of the team
- Have the ability to build a team for smooth and efficient functioning
- Be responsible for the overall record keeping including photographs and their digital storage
- Be able to undertake a surgical audit of patients with emphasis on evidence based criteria
- Collate information for the purpose of presentations and publications,
- Psychologically evaluate the potential patient with unrealistic expectations and BDD,
- Decide on reference to psychologist / psychiatric for expert opinion
- Decide on treatment refusal to a patient
- Deal calmly with the dissatisfied patient