Curriculum of Plastic Surgery Higher Surgical Training (Ed. Dec 2020)

Plastic Surgery Board

College of Surgeons of Hong Kong

Overview

The scope of higher surgical training in Plastic Surgery consists of the principles, practice and basic sciences of both adult and paediatric plastic surgery in clinical care. It covers various domains in professional knowledge, skills and performance, safety and quality, communication and trust with patients as well as ethical issues leading to good clinical practice and safe patient care.

Higher surgical trainees are rotated among different training centres over the 4-year training to gain exposure to various clinical setting and learn from respective supervisors the wide spectrum of Plastic Surgery practice.

A 2-month rotation in Aesthetic and Reconstructive surgery in HKSH and 2-month rotation in Hand and Microsurgery allow the trainees a more structural learning opportunities that complement the setting in public hospital training centres within Hospital Authority.

Requirement

All trainees need to complete mandatory courses that form the basis of knowledge and skills transfer in essential elements in Plastic Surgery before eligible to sit for the Exit examination. The mandatory courses include

- EMSB
- ATLS,
- AOCMF
- Microsurgery
- Research.
- Critical Care (added for Jan 2021 new entry)

Assessment

Assessment is based on continuous guidance and monitoring of trainees throughout the 4-year training with multiple assessment tools such as

- regular supervisors' assessment report, log-book achievement
- research projects
- procedure-based assessment (PBA)
- Mini clinical evaluation exercise (Mini-CEX)
- Case-based discussion (CBD)
- fulfillment of training plan
- Fellowship Exit Examination with MCQ, Viva, communication skills and clinical sessions

The syllabubs in Plastic Surgery Higher Surgical Training is lists as follows:

Knowledge	**Skills/procedures**
(a) Wound healing, wound care and tissue transplantation • Basic principle of wound healing, pathological wound healing • Management of hypertrophic scar and keloid scar • Knowledge of wound care and dressing applications, wound infection and management, advanced wound healing and management of complex wound • Tissue transplantation, principles and applications. • Tissue regeneration and engineering • Biomaterials in Plastic Surgery	• Debridement of wound and wound closure • Range of wound closure techniques including undermining, scoring, various designs of plasties and local flaps, wound care and dressing • Application of closed suction drainage • Steroid injection for hypertrophic or keloid scar • Excision and release of scar using range of skin graft, local flaps, or distant flaps, serial resection • Application of tissue expansion • Application of negative pressure therapy • Harvesting and application of skin, cartilage, bone graft • Use of dermal substitute, allograft, xenograft
(b) Trauma and / or infection which involves soft tissues as part of the injury • Life support, airway protection and multidisciplinary care of trauma • Acute management of trauma, wound care and reconstruction • Late care of trauma and aesthetic and reconstructive surgery including scar revision • Management of surgical infections of skin and soft tissue including cellulitis, panniculitis, necrotizing fasciitis, soft tissue abscess including parapharyngeal abscess • Reconstruction of large skin / soft tissue defects secondary to trauma, infection or other pathological resection • Chronic wound management including osteomyelitis, osteoradionecrosis	• ATLS principles of trauma care • Airway management and tracheostomy • Drainage of abscess and debridement principles of superficial and deep infection • Surgical approach and drainage of abscess in HN regions • Ranges of reconstruction techniques for skin and soft tissue coverage from skin graft, local, pedicled and free flaps ➢ fasciocutaneous flaps for skin coverage ➢ gastrocnemius muscle flap for proximal third/knee defects ➢ ALT, LD and radial forearm free flaps & performing most steps in the raising and anastomosing of free flaps ➢ harvesting a free fibula flap ➢ Exposure of recipient vessels ➢ Interposition vein graft and nerve graft e.g. sural nerve • Nerve repair and use of sural nerve graft • Release of scar contracture and reconstruction including aesthetic revision • Reconstructive techniques for complex wound or skin defects e.g. hidradenitis suppurativa, pressure sores, osteoradionecrosis, Fournier's gangrene
(c) Maxillofacial trauma • Principles in management of craniofacial trauma and life or emergency support • Basic knowledge of applied anatomy, clinical diagnosis, investigations and management of craniofacial trauma • Management of soft tissue and bony injuries • Principles of close reduction or open reduction of bony	• Emergency management of craniofacial bleeding including retrobulbar haemorrhage and airway support • Surgical approaches to craniofacial skeleton e.g. coronal and upper and lower buccal sulcus incisions, transconjunctival, transblepharoplasty, Weber-Ferguson and open rhinoplasty, • Safe exposure of fracture sites and reduction of fragments • Close reduction of common fractures

fractures including application of intermaxillary fixation • Surgical open reduction and internal fixation of common orbital, midface and mandibular fractures, including use of biomaterials or implants • Management of facial trauma in Paediatric patients • Reconstructive surgery for late effect of maxillofacial trauma	• Open reduction and internal fixation of common fractures • Approach to orbital fractures ➢ ability to stent and repair duct ➢ techniques for management of displaced canthal ligaments ➢ Use of bone graft / implants to restore volume ➢ Force duction test • manipulation of nasal bones and septum • nasal packing and splintage • Application and techniques of intermaxillary fixation • Implants and prostheses, handling and choice of alloplast for inlays and onlays, use of drills, banders and screws drivers • Bone grafting (variety of donor sites) • Management of late effect of fracture, resorption, osteomyelitis, implant complications • Modification of techniques in Paediatric patients • Advanced ➢ Orthognathic surgery relating to craniofacial syndromes ➢ Le Fort I +/- distraction osteogenesis, sagittal split osteotomy, bimaxillary surgery, segmental orthognathic surgery, palatal expansion and segmental alveolar transport ➢ Distraction osteogenesis of the craniofacial skeleton. ➢ Endoscopic techniques, subperiosteal surgery, genioplasty, advanced rhinoplasty
(d) Burns –thermal, electrical, chemical and radiation, including their sequelae • General principles of burn management, pathophysiology of minor and major burns and support ➢ Management of specific types of burn injury e.g. chemical, electric, radiation ➢ Acute burn management such as airway, resuscitation, transferal to burn centre, escharotomy / fasciotomy ➢ All aspects of burn wound management including assessment, escharotomy, dressing, skin grafting, use of autografts, allografts or xenografts, skin and dermal substitute, and wound infection ➢ Differences in management between adult & paediatric patients ➢ Burn scar management and related reconstructive	• Acute airway management including endoscopy, tracheostomy, airway maintenance • Stabilizing associated injuries and bleeding • Venous access in burn patients • Assessment of burn area and depth, inhalation injury • Escharotomy and fasciotomy • Application and change of various burn dressings • Excision of burn wound and use of skin graft for burn wound management • Modification of skin grafts, meshing and use of skin substitutes • Modification of burn care in Paediatric patients • Range of reconstructive techniques in facial reconstruction e.g. periorbital, perioral, hair transplant, resurfacing, scar release • Range of reconstructive techniques in joints and hands reconstruction with skin graft, local flaps, pedicle and free flaps • Z plasty and various plasties and flap designs

surgery ➢ Reconstructive surgery in burn management including facial reconstruction ➢ Rehabilitation and psychological care of burn patients	• Safe sedation and pain control • Rehabilitation of burn scar, pressure garments, splintage, scar management, laser resurfacing • Special care in specific type and site of burn • Amputation of severely injured limb burn injury
(e) Cleft and congenital craniofacial deformities • Principles in management of cleft lip and palate • Primary and secondary cleft lip and palate surgery including cleft nose deformities • Auxiliary care in cleft surgery such as pre-surgical orthodontics, speech development, velopharyngeal insufficiency, orthodontic and orthognathic care • Principles of management craniofacial anomalies and correction • Craniosynostosis: anatomy and deformity, principle of management • Psychological support, counselling, screening	• Unilateral / bilateral cleft lip repair ➢ Standard mark up a cleft lip repair according to current techniques ➢ repair the cleft lip and nose accordingly ➢ vary standard marking plan for subtle differences ➢ able to perform nasal dissection, repair of mucosa and muscle, repair of ala base and alar reduction, sutures for nasal suspension, lip closure, lengthening flaps, vermilion flap and mucosal balancing. • correction of secondary deformities of the lip and nose • use of ABBE's flap, dermal fat graft • management of the cleft airway and bleeding complications • Cleft rhinoplasty (primary and secondary), hump reduction with rasp, management of the septum, infracture, cartilage graft and composite graft, application of splint • Cleft palate repair ➢ Design and repair of the palate and associated involved structures according to current techniques ➢ safe muscle dissection, pharyngoplasty, safeguard vascular pedicle and adaptations for anatomical variation ➢ elevation of a vomerine flap • Management of submucosal cleft • Closure of palatal fistula including tongue flap • nasoendoscopy in the diagnosis of speech disorder • closure of alveolar fistula with appropriate technique. • harvesting autologous bone grafts including iliac crest bone, rib, costochondral and cranial bone • canthopexies, canthoplasties and eyelid balance, • Advance ➢ major segmental osteotomies and advancements of the craniofacial complex

(f) Other congenital and acquired deformities of the head and neck (including vascular abnormalities) • Basic anatomy, physiology, development and pathology of head and neck deformities, congenital or acquired • Clinical diagnosis, investigations and management principles of HN deformities of soft tissue or bony origin including plexiform neurofibroma, Parry Romberg syndrome, fibrous dysplasia • Aesthetic or functional surgical reconstruction or non-operative care of HN deformities including resection, debulking or augmentation • Management of acute or late complications arising from the pathologies or surgical correction including facial paralysis • Facial reanimation, principle of management, timing of surgery, dynamic and static reanimation and complications • Auricular anatomy. Congenital ear deformity such as microtia, constricted ear, prominent ear and correction. Acquired ear deformity such as reconstruction of auricular defect after skin cancer resection/ trauma • Vascular malformation and its investigations, principles of management including laser, sclerotherapy, radiation, surgery and reconstruction, and interventional radiological embolization • Psychological care, counselling and screening of related deformities	• Ear reconstruction ➢ repair of lacerations of the ear with or without cartilage ➢ excision of accessory auricles, Darwen's tubercle, periauricular sinuses, cysts, keloids with reconstruction ➢ repair of split earlobes and earlobe reconstruction ➢ correction of prominent ear, cryptotia, constricted ear, cauliflower ear ➢ ear reconstruction – autologous and osseointegrated implant for anotia/microtia ➢ harvesting cartilage, carving cartilage to framework ➢ dissecting skin envelope, temporalis fascial flap and insetting ➢ conchal cartilage graft harvest, carving and insetting • Eyelid reconstruction ➢ Tarsorrhaphy techniques ➢ orbital translocation ➢ various techniques of eyelid reconstruction • Nasal reconstruction ➢ Primary and secondary rhinoplasty ➢ Alar reduction ➢ Use of local flaps, composite graft, forehead flap • Oral ➢ Management of microstomia and macrostomia • Facial bones ➢ Le Fort I or Le Fort II advancements of maxilla ➢ mandibular distraction and reconstruction • Tissue expansion in the head and neck • Fat transfer for contouring e.g. hemifacial • Soft tissue free flaps e.g. adipofascial flaps • Management of complications of corrective surgery • Vascular lesions ➢ Sclerotherapy for vascular lesions ➢ Aesthetic excision of superficial vascular malformations ➢ Use of vascular laser ➢ Reconstruction of vascular defects by vein grafting ➢ Major excision of vascular malformations involving multiple tissue layers and reconstruction ➢ Fasciotomies for compartment syndrome • Removal of swellings e.g. lipoma, schwannoma, neurofibroma, LN, excision of other benign tumours of bone, fibrous dysplasia and soft tissue • excision of malignant tumours of bone and soft tissue including

	compartmentectomy and reconstruction of resultant defects • axillary lymphadenectomy • Facial reanimation techniques for asymmetry and nerve palsies ➢ Static & dynamic techniques ➢ Nerve grafting ➢ Use of botox / fillers/ fat grafting
(g) Head and neck tumours (benign and malignant) • Principles of diagnosis, staging and treatment of head and neck tumours • Multi-disciplinary approach in the management of head and neck tumours • Surgical management of common benign head and neck tumours e.g. salivary and thyroid glands. • Surgical management of common malignant head and neck tumours e.g. oral cavity, oropharynx, larynx, hypopharynx, nasopharynx, paranasal sinuses; regional lymph nodes and related reconstruction • Reconstructive principles for small and large defects in HN region, consideration and options of reconstruction, choice of flap for specific region • Prevention and management of complications • Rehabilitation of head and neck cancer patient	• Clinical assessment of head and neck tumours • Endoscopic assessment of upper aerodigestive tract +/- biopsy • USG head and neck region +/- image guided biopsy • Fine Needle Aspiration / trucut biopsy / open biopsy of head and neck tumours including lymph nodes • Salivary gland tumours ➢ Major and minor salivary gland tumour removal with appropriate surgical margins including sialoadenectomy and parotidectomy ➢ Facial nerve management including reconstruction ➢ Regional node management ➢ Reconstruction: local / regional / free • Thyroid gland tumours ➢ Thyroidectomy ➢ Regional node management • Oral cavity tumours ➢ Excision of tumours with appropriate surgical margins ➢ Regional node management ➢ Reconstruction: local / regional / free flap • Oropharynx ➢ Excision of tumours with appropriate surgical margins ➢ Approaches: Transoral / Transoral robotic surgery / Transcervical / Mandibulotomy ➢ Regional node management ➢ Reconstruction: regional / free flap ➢ Management of Human Papillomavirus (HPV) associated tumours • Nasopharynx ➢ Excision of tumours with appropriate surgical margins ➢ Approaches: ✧ Endonasal endoscopic ✧ Transoral robotic ✧ Open: maxillary swing / transpalatal / transcervical ➢ Management of retropharyngeal lymph node ➢ Management of internal carotid artery: ✧ Extra-cranial intra-cranial bypass if >180deg

	encasement ✧ Coverage of exposed internal carotid artery ➢ Management of intra-cranial extension: ✧ combined cranionasal approach ✧ combined craniofacial approach ➢ Regional node management ➢ Osteoradionecrosis management ➢ Reconstruction: local / regional / free flap • Hypopharynx and cervical esophagus ➢ Excision of tumours with appropriate surgical margins in irradiated and radiation naïve patients ➢ Approaches: transoral robotic surgery / transcervical +/- manubrial resection / total pharyngo-laryngo-esophagectomy ➢ Management of regional nodes ➢ Reconstruction of partial and circumferential pharyngeal +/- esophageal defects using regional / free flap • Larynx ➢ Excision of tumours with appropriate surgical margins ➢ Approaches: Transoral robotic surgery / transcervical +/- manubrial resection ➢ Management of regional nodes ➢ Reconstruction: regional / free flap • Paranasal sinuses ➢ Approaches: Endoscopic / open ➢ Maxillectomy ➢ Orbital exenteration ➢ Management of regional nodes ➢ Reconstruction: local / regional / free flap • Management of regional nodes ➢ Clinically N0: selective neck dissection ➢ Clinically N+: modified radical neck dissection / radical neck dissection • Reconstruction ➢ local flap: rotation / transposition / advancement ➢ regional flap: pectoralis major flap / latissimus dorsi flap / temporalis flap ➢ free flap: anterolateral thigh flap / vastus lateralis flap / radial forearm flap / medial sural flap / rectus abdominus flap / fibula flap / jejunal flap ➢ Management of complications and failed reconstruction ➢ Nerve and vascular reconstruction

	➢ Prosthesis and 3D printing • Stoma care Temporary / Permanent end tracheostme • Prevention and management of complications ➢ Osteoradionecrosis ➢ Anastomotic leakage ➢ Blow-out bleeding
(h) Congenital and acquired deformities of the trunk, limbs and other sites where the provision of skin cover is a component ➢ Principles of management reconstruction of congenital and acquired trunk and limbs deformities, tissue excess or tissue losses including cancer surgery ➢ Management of complicated hernia, fascia tissue loss, diastasis recti, abdominal wall closure problem and related reconstructive procedures ➢ Acute management of limbs trauma or infection with skin defect and reconstruction, including principles of amputation ➢ Management of compartment syndrome ➢ Management of lymphedema, vascular malformation, neurofibromatosis or other congenital or acquired deformities causing skin and soft tissue problems and functions	• Chest ➢ debridement of a chest wall wound ➢ chest wall osteoradionecrosis and management ➢ apply negative pressure dressing to a chest wall defect ➢ excision of chest wall lesions & coverage of chest wall defect with skin grafting, local or regional flaps ➢ pectoralis major and rectus abdominis pedicled muscle flaps for median sternotomy coverage ➢ fasciocutaneous / musculocutaneous / muscle-only flap reconstruction for thoracic defects (e.g serratus anterior, trapezius, latissimus dorsi or parascapular flaps) ➢ reconstruction of defect with omental flap (in concert with general surgery colleague) • Abdomen ➢ various patterns of abdominoplasty ➢ correction of lax abdominal musculature, diastasis ➢ surgery for complicated abdominal defect, relaxing incisions, component separation and use of synthetic mesh for reconstruction for tumour resection, postoperative complications, post infection or complicated hernia ➢ regional liposuction / liposculpture ➢ BELT/body lift, buttock lift, thigh lift & brachioplasty, ➢ scar revision including management of the 'dogear' • fat graft harvest, preparation and lipofilling in regional sites • circumferential liposuction, and major staged fat graft for general contour restoration • secondary contouring procedures to correct unsatisfactory results • Limbs ➢ Acute care of limb injury, stabilization and control of bleeding ➢ measure compartment pressures and interpret results ➢ release four muscle compartments in leg in cases of

	compartment syndrome ➢ amputation of non-salvageable limbs ➢ application of a plaster cast • reconstruction/anastomosis/ surgical excision of lymphoedema • Excision of large tissue deformities of limbs and reconstruction with skin graft or flaps
(i) Congenital and acquired deformities of the urogenital system • Anatomy, embryology, physiology and pathology of genitalia • Penoscrotal trauma, infection, tumour and surgical resection and reconstruction • Management and reconstruction of hypospadias and other genital anomalies • Gender reassignment Surgery • Management of Fournier's gangrene and associated complications • Reconstruction for perineal defect (including penoscrotal, vaginal reconstruction)	• Circumcision for phimosis or other pathologies • meatotomy • principles of hypospadias repair ➢ trimming of skin envelope following hypospadias repair ➢ harvesting of foreskin/buccal mucosal full thickness graft, preparation and closure of the donor site. ➢ artificial erection test ➢ reconstruction of midshaft and proximal hypospadias ➢ distal hypospadias reconstruction • Excision of perineal lesions and reconstruction ➢ skin graft after cancer / infection surgery e.g. SCC, EMPD, Fourniers ➢ local flap reconstruction of vagina/labia including lotus and gracillis, resurfacing penile shaft, coverage of exposed testes for immediate defect ➢ reconstruction of large perineal defects & pelvic floor – external pudendal flap, gracillis, posterior thigh flap, VRAM, ALT, or free flaps for major perineal defects after gynaecological or rectal surgery ➢ groin dissection for tumour clearance • surgical correction of epispadias, female genital anomalies and ambiguous genitalia • assessment of size of prosthesis needed • insertion of testicular prosthesis • specific operations for gender reassignment
(j) Paraplegic skin and soft tissue problems • Pressure injury, prevention and management including use of flaps reconstruction, pressure mapping and rehabilitation • Management of chronic leg ulcers and reconstruction • Facial paralysis and reanimation with static or dynamic reconstruction	• Debridement of pressure ulcers • Staging of pressure injuries and pressure mapping • Surgery and reconstruction of pressure wound using ranges of flaps reconstruction • Use of negative pressure therapy/ special wound dressings • Biopsy of chronic ulcers • Surgery and reconstruction of chronic leg and foot ulcers ranging from skin graft to flap reconstruction • Facial paralysis and reanimation ➢ exploration, protection and identification of facial nerve

	branches ➢ direct repair of facial nerve & nerve grafting, cross facial nerve grafting ➢ insertion of static slings ➢ dynamic slings (Temporalis, masseter) ➢ free muscle tissue transfer techniques (gracilis, pectoralis minor) ➢ cranial nerve transfers (hypoglossal, accessory) ➢ techniques of Botox injection of face ➢ techniques of biofeedback and electrical stimulation of facial musculature ➢ ancillary reconstructive techniques (autologous fat transfer, tarsorrhaphy, gold weight, re-positioning parotid ducts etc) ➢ reconstructive aesthetic techniques (endoscopic browlift, facelift, upper & lower blepharoplasties)
(k) All aspects of hand surgery • Principles of hand surgery including nerve and tendon injuries and repair • Acute management of hand trauma and reconstruction including amputation and replantation • Hand infections and extravasation injury • Congenital hand anomalies, principles of examination, treatment and reconstruction options • Scar release and reconstruction of hand	• Planning of incision and biopsy for suspected tumours of the upper limb • Surgery for ganglion excision, trigger thumb/finger release • surgery for uncomplicated traumatic conditions of the Childs hand and fingers • fingertip reconstruction: • nail bed repair • heterodigital flap reconstruction including cross-finger flap, thenar flap • local flap (transposition, rotation, island) for skin coverage after tumour excision, trauma or infection • extravasation injury and management • fasciocutaneous flaps around the forearm, groin, posterior interosseous artery flap, flap elevation • debridement of complex wounds • fracture fixation: closed reduction with application splint or cast, K-wiring and interosseous wiring, plate and screws, and lag screw • extensor tendon repair • flexor tendon repair (Zones III-V) • tendon graft harvest • scar release and different types of skin grafts including split skin/full thickness skin graft • Local flap reconstruction of hands and web space including postburn scar • The use of local anaesthetics and nerve blocks of limbs

	• Advance ➢ simple syndactyly separation ➢ correction of duplicate thumb ➢ correction of polydactyly ➢ palmar fasciectomy for Dupuytren's disease ➢ second toe transfer ➢ revascularization digit or upper limb part ➢ replantation of digit or upper limb segment
(l) Microsurgery in all its applications to reparative and reconstructive surgery • Principles of microsurgery in vascular anastomosis and nerve reconstruction • Anatomy, design, application of various free flaps in reconstructive surgery and advances in flap design and perforator flaps • Intraoperative assessment of flap including use of dye and IR monitoring • Monitoring and management of complications of microsurgery • Application of microsurgery in Head and Neck reconstruction • Use of microsurgery principles in other reparative or reconstructive surgery	• Use of microscope and preparation • Application of Doppler and microscopic instruments • Microscopic dissection and preparation of vessels • Preparation of recipient vessels / interposition vein graft • Harvesting of common free flaps • Arterial and venous anastomosis • peripheral nerve repair • nerve graft harvest • muscle transfer for reanimation • simple debridement of non-viable flap and appropriate application of temporary dressing • salvage surgery for flap failure • application of leeches to flap in venous congestion • Use of ICG device and interpretation of findings
(m) Aesthetic and Reconstructive surgery of the breast • Basic anatomy, physiotherapy and pathology of breast disorders • Diagnosis, aesthetic assessment and safe management of all deformities of the breast, developmental and acquired, pathological • Breast cancer reconstruction with autologous tissue with flaps or lipotransfer /implants / and subsequent revision procedures. Nipple sparing mastectomy, primary and secondary reconstruction/ delayed immediate reconstruction, NAC reconstruction • Management of other breast deformities (congenital or acquired): e.g. hypermastia, ptosis, atrophy, inverted nipple, gynaecomastia, Poland syndrome, tuberous breast, accessory breast, and surgical reconstruction including complications care • Aesthetic breast surgery: breast augmentation with	• excision of skin lesions of the breast and accessory breast with aesthetic principles • oncoplastic surgery of breasts • aspiration / surgical drainage of breast abscess, aspiration of cyst • surgical drainage / removal of PAAG • scar revision in aesthetic breast surgery • correction of the inverted nipple or other nipple deformities • breast augmentation by various routes, in various planes • breast augmentation measurements • Wise pattern breast reduction /vertical pattern breast reduction • mastopexy for ptosis and correction of tuberous breast • excision of gynaecomastia, incorporating liposuction as appropriate • synchronous mastopexy and breast augmentation in various patterns • revision procedures following previous aesthetic surgery of the breast

implants or autologous fat, breast reduction. • Management of complications of breast implant, such as capsular contracture, rupture or migration, breast implant-associated anaplastic large cell lymphoma • Management of other complications of breast augmentation e.g. PAAG and other fillers • Psychological assessment of patients presenting for breast surgery	• capsulectomy / capsulotomy and exchange of implants for symmetry and complications • fat grafting of the breast • use of implants / expanders in aesthetic or reconstructive breast surgery • breast reconstruction including NAC reconstruction • harvesting, inset and shaping of common reconstruction of breast e.g. TRAM, LD • supercharging of flap reconstruction • revision surgery for breast reconstruction including hernia repair • revision of IMF
(n) All aspects of aesthetic surgery • Principles of aesthetic surgery in diagnosis, assessment and management including patient counselling, treatment options, management of outcomes and complications, and related ethical issues • Basic anatomy and functional application of face and neck, muscle of facial expression, eyelids, nose, oral commissure in relation to Plastic Surgery • Aesthetic surgery of the face including blepharoplasty, rhinoplasty, facial rejuvenation, forehead, face and neck lift, facial contouring of soft and bony tissue, otoplasty for aesthetic improvement of congenital or acquired anomalies • Body contouring, liposuction. lipofilling and post bariatric surgery reconstruction, including aesthetic breast reconstruction • Principles of injectables / fillers/ botulinum toxins in aesthetic and reconstructive plastic surgery • Laser surgery, application and safety in relation to Plastic Surgery including vascular, pigment, CO2 laser, intense pulse light and other energy modalities of treatment devices • Hair transplant and hair removal, principles of management and surgical options • Body dysmorphic disorder and management	• excision of facial skin lesions for aesthetic indications • revision of scar and plastic reconstruction techniques • use of injectables, fillers and paralytics in facial rejuvenation • facelift, forehead lift, mini-lift, open and endoscopic • liposuction for the face and neck areas, submental lipectomy • liposuction and liposculpture of trunk and limbs • post bariatric body contouring surgeries • facial rejuvenation by laser / chemical peel / dermabrasion • facial contouring of soft/bony tissue such as genioplasty, malarplasty (operative and noninvasive approach) • Blepharoplasties ➢ upper lid blepharoplasty ➢ lower lid blepharoplasty subciliary or transconjunctival approaches ➢ ptosis surgery ➢ canthoplasties • Rhinoplasties ➢ open /closed rhinoplasty ➢ Septo-rhinoplasty ➢ dorsal hump, reduction and augmentation ➢ osteotomies of nasal bones (various patterns) ➢ use of cartilage/ bone graft /implants ✧ harvesting cartilage graft from ear, costochondral junction, nasal septum ✧ harvesting calvarial bone graft ➢ alar reduction ➢ surgery for rhinophyma ➢ drainage of septal haematoma ➢ application of internal and external nasal splints ➢ nasal packing for LA & bleeding control

	➢ management of complications including haemorrhage ➢ secondary procedures to correct unsatisfactory results • Otoplasty ➢ infiltration of ears with local anaesthesia including greater auricular nerve blocks ➢ Surgery for prominent ear ➢ Conchal reduction ➢ primary otoplasty with cartilage-scoring techniques ➢ primary otoplasty with suture-only techniques ➢ management of complications including haemorrhage, infection and necrosis of skin and cartilage ➢ cauliflower ear management ➢ techniques to correct other deformities such as cup ear, lop ear and Stahl's deformity ➢ secondary procedures to correct unsatisfactory results including ear reconstruction techniques
(o) Knowledge of medical ethics, aspects of informed consent and the medico-legal implications of clinical practice and developing surgical practice • Medical ethics in all aspects of patient care on aesthetic and reconstructive management • Medico-legal implications related to the regulations and laws of Medical Council in Hong Kong • Informed consent and patient rights of giving consent to treatment • Perioperative care, sedation or MAC safety, life threatening support • Principles of conservative, curative and palliative treatment and holistic care of advanced diseases including advanced directives and end of life care • Principles of safe and good medical practice • Medical professionalism and communication skills • Body dysmorphic disorder	• Getting an informed consent • Breaking bad news • Advanced directives / DANCPR • Communication during consultation • Safe use of local anesthetics, sedation and pain management during operation • Pain management for cancer patients • Lifesaving support during emergency • Patient communication after operative complications • Complaint management • Counselling of patients with body dysmorphic disorder • Clinical photography and documentation • Patient privacy
Remarks: The syllabus is not exclusive and only covers the essential parts of the higher surgical training in Plastic Surgery in Hong Kong.	