

Syllabus for M.Ch., (Plastic and Re-constructive Surgery) Course

General Principles:-

1. History of Plastic Surgery and its broad scope at the present time.
2. Anatomy and functions of skin.
3. Split skin grafts and full thickness skin grafts, their take and Subsequent behaviour.
4. Local skin flaps.
5. Pedicled skin flaps and tubs.
6. Unstable scar and scar contracture.
7. Care of wounds, dressing, techniques and splints.
8. Wound healing.
9. Grafts – fat, fascia, tendon, nerve, cartilage, bone.
10. Infective skin gangrene.
11. Hospital infections.
12. Suture instruments.
13. Surgical instruments.
14. Implant materials used in Plastic Surgery.
15. Principles of genetics and general approach to the management of congenital malformations.
16. Flaps-Fasciocutaneous muscle, musculocutaneous, congenital malformations.
17. Local anaesthesia, nerve blocks, regional anaesthesia.
18. Principles of anaesthesia for infants, adults, hypothermia, hypotensive anaesthesia.
19. Tissue expansion.
20. Keloid, hypertrophic scars.
21. Endoscopy in Plastic Surgery.

Face:-

1. Growth and development changes in face, anatomy of facial skeleton.
2. Structure and development of teeth.

3. Leprosy deformities of face.
4. Temporomandibular joint dysfunctions.
5. Fractures- nose, maxilla, mandible, zygoma, orbit-early management and treatment of sequelae.
6. Corrective Rhinoplasty.
7. Reconstructive Rhinoplasty.
8. Facial paralysis.
9. Reconstruction of external ear.
10. Reconstruction of eyelids, ptosis.
11. Congenital deformities of face and jaw bone.

Cleft Lip and Palate and Craniofacial Anomalies:-

1. Embryology of head and neck (excluding central nervous system).
2. Regional anatomy of head and neck.
3. Embryogenesis of cleft lip and palate.
4. Cleft lip and palate, alveolar clefts.
5. Velopharyngeal incompetence.
6. Orthodontics, speech therapy in cleft lip and palate.
7. Principles of craniofacial surgery.
8. Rare craniofacial clefts, Tessier's clefts.
9. Craniosynostosis, hypertelorism, craniofacial microsomia.

Tomours of Head and Neck and Skin:-

1. Vasoformative lesions of the skin and adenexa.
2. Jaw tumours.
3. Cancer of upper Aerodigestive system.
4. Reconstruction of mandible.
5. Reconstruction of maxilla.
6. Malignant and benign tumours of head and neck.
7. Tumour of skin.
8. Principles of prosthetic replacement of Jaw defects.

Trunk:-

1. Reconstruction of full thickness defects of the abdomen and thorax.

2. Decubitus ulcer.
3. Breast reconstruction.

Aesthetic Surgery:-

1. Chemical peeling and dermabrasion.
2. Blepharoplasty.
3. Face lift.
4. Abdominoplasty.
5. Body contouring, liposuction.
6. Reduction mammoplasty.
7. Augmentation mammoplasty.
8. Laser therapy.
9. Aesthetic Rhinoplasty.

Lower Extremity:-

1. Functional anatomy of foot.
2. Lymphedema.
3. Reconstructive surgery of lower extremity.
4. Leprosy deformities of leg and foot.

Genito Urinary:-

1. Embryology of the male and female external genitalia.
2. Anatomy of the male and female external genitalia.
3. Hypospadias.
4. Epispadias and ectopic vesicae.
5. Reconstruction of external genitalia.
6. Vaginoplasty.
7. Trans-sexualism (intersex).

Hand:-

1. Embryology of upper extremity.
2. Functional anatomy of hand.

3. Examination of hand.
4. General principles of hand surgery.
5. Treatment of acute hand injuries.
6. Finger tip injuries.
7. Flexor tendon injuries.
8. Extensor tendon injuries.
9. Principles of reconstruction in mutilating hand injuries.
10. Fractures of hand and dislocation of hand –metacarpal, phalanges.
11. Nail injuries, grafting.
12. Pollicisation.
13. Thumb reconstruction.
14. Peripheral nerve injuries, electro diagnostic tests.
15. Brachial plexus injury.
16. Innervated flaps.
17. Vascular malformations of upper extremity.
18. Lymphedema in upper extremity.
19. Ischaemic conditions of upper extremity.
20. Vasospastic conditions of upper extremity.
21. Nerve compression syndromes.
22. Surgery for spastic and tetraplegic hand.
23. Problems of small joints.
24. Dupuytren's disease.
25. Principles and treatment of old and neglected hand deformities.
26. Rheumatoid arthritis of hand.
27. Hand infections.
28. Congenital deformities of hand, finger, thumb.
29. Tendon transfers for radial, ulnar and median nerve injury.
30. Leprosy deformity of hand.
31. Benign and malignant tumours of hand.
32. Rehabilitation of hand, prosthesis.

Microvascular:-

1. Principles of microsurgery and its applications in plastic surgery.

2. Replantation and revascularization surgery.
3. Microvascular tissue transfers.

Burns:-

1. Thermal burns.
2. Electrical burns.
3. Chemical burns.
4. Radiation burn.
5. Pathophysiology of burn shock.
6. Nutrition in burns.
7. Facial burns.
8. Tangential excision and sequential excision.
9. Reconstruction of burn hand and upper extremity.
10. Post burn contractures –treatment of sequelae.
11. Burn wound infection, sepsis.
12. Principles of planning in event of burn disaster.
13. Organization of Burns Unit.

Text Books Recommended:

1. Paediatric Burns-Total Management of the Burned Child by Marella L Hanumadass and K Mathangi Ramakrishnan