MODULE 3

Facial Soft Tissues

FACIAL SOFT TISSUES

15.02.05

Preamble - Objectives and Outcomes

ALSO SEE OVERALL PREAMBLE (hypertext link on webpage)

At the time of presentation for final FRACS examination the candidate should have a good understanding of all aspects of general and specific problems associated with the soft tissues of the face. Candidates particularly interested in aesthetic facial plastic surgery should consider proceeding to an Aesthetic Surgical Fellowship.

The graduating trainee will demonstrate their ability to:

- approach and carry out procedures with due attention to safety of patient, self, and others
- take a history, perform an examination, and assess operative and non-operative alternatives
- accurately identify, assess and manage risks
- consider all issues relevant to the patient
- manage patients in ways that demonstrate sensitivity to their physical, social, cultural, and psychological needs
- adapt their skills in the context of each patient—each procedure
- communicate information to patients (and their family) about procedures, alternatives, and risks associated with surgery in ways that encourage their participation in informed decision making
- effectively minimise and manage complications

In the following module the material required is presented under the headings of "Revisional Knowledge", "Core Knowledge" and "Outline Knowledge".

"Revisional Knowledge" should have been largely covered in the module for the Plastic & Reconstructive Surgical Science and Principles examination, but continued revision and updating throughout clinical training is mandatory.

"Core Knowledge" is the material, which will be required to be known in detail for the Final Fellowship Examination and to practice Plastic & Reconstructive Surgery in general.

"Outline Knowledge" is material of which the principles need to be understood, but a detailed knowledge, such that the trainee would be expected to manage the conditions on their own is not required.

Reading material will be presented, but cannot be all encompassing, nor can the material listed in the curriculum modules. Plastic & Reconstructive Surgery is an evolving and changing area and trainees are required to read widely in the literature and keep up with recent events.

Coding:

Most topics within this module are allocated to one of the following largely "pathological" groupings

Coding Used:

A = Aesthetic
C = Congenital and Paediatric
I = Inflammatory and Infection
N = Neoplastic & Tumours
D = Degenerative Conditions
P = Procedures and Techniques
T = Trauma

A thorough grasp of the anatomy, physiology and pathophysiology is required for each topic.

Resources

Trainees should attend public and private outpatient clinics and operating sessions at every opportunity and participate in the decision-making process, as well as the operative procedure and the peri-operative care. In particular, it is a requirement of the Board of Plastic and Reconstructive Surgery that trainees accumulate a minimum of six months pure aesthetic surgery in their training period.

Recommended Reading

Specifically - Plastic Surgery - Indications, Complications and Outcomes - B Achauer, Editor, Mosby 2000, Volumes 1 - 5 as appropriate.

Suggested Reading

A thorough knowledge of the literature as it applies to Facial Soft Tissue Management covered in Plastic and Reconstructive Surgery, British Journal of Plastic Surgery, Annals of Plastic Surgery, and Aesthetic and Cosmetic Professional and "Popular" Journals, Publications, Articles and Presentations.

Delivery of this Module

Trainees should be able to learn the material in this module by attendance at outpatient clinics, in the operating theatre, at ward rounds and audit meetings and by involvement in the peri-operative management of patients. The Annual Registrars' Course is an important part of the exposure in this module, in conjunction with the Regional Training Programmes. In addition, where possible, trainees should attend the Annual Scientific Congress of the Royal Australasian College of Surgeons, the Annual Scientific Meeting of the Australasian Society of Aesthetic Plastic Surgeons and courses and workshops offered under the auspices of The Australian Society of Plastic Surgeons, Australasian Society of Aesthetic Plastic Surgeons, and the Royal Australasian College of Surgeons from time to time.

Assessment Methods Used for this Module

- Consultant assessment and mentor reports throughout training.
- Report from the Supervisor of Surgical Training in their region.
- Log Book assessment review
- Final Fellowship Examination in Plastic & Reconstructive Surgery, including written questions, long and short case clinical examinations, vivas in surgical anatomy and applied anatomy, and operative surgery and pathology (7 sections).

Revisional Knowledge: Much of the basics in this will have already been covered in the Plastic and Reconstructive Surgical Science and Principles Examination. Trainees are required to be able to analyse and apply appropriately the science and principles of the following in clinical environments:

- Growth and Puberty
- Aesthetic "norms" and "racial" differences
- Ageing – normal, abnormal, and pathological
- Co-morbidities and predisposing conditions including smoking, obesity, diabetes, bleeding and clotting problems.
- High risk and dissatisfied aesthetic surgical patient.
- Clinical photography and medical imaging.
- Anaesthesia:
  - Local and regional
  - Sedation and general
  - Agents and doses
  - Effects, side effects over dose and management
- Patient selection for reconstructive and aesthetic surgical alternatives in treatment and informed consent

Core Knowledge: A detailed knowledge and technical expertise will be expected. All trainees are required to be able to diagnose, plan, perform effectively, and manage:

- Clinical examination of facial soft tissues, effectively dealing with
  - general and specific topographical and aesthetic units
  - structural and functional units
- communicate information to patients about procedures, alternatives, and risks associated with surgery to ensure their involvement in informed decision making

- Face, Neck & Brow:
  - Pathophysiology, embryology and abnormalities, and the diagnosis, investigation and treatment of:
    - Congenital deformities C
    - Acquired deformities
      - Trauma T
      - Tumours N
      - Ageing D
  - Excision, management, and reconstructive options using:
    - Grafts P
      - Split skin, composite, and full thickness P
      - Donor sites P
    - Flaps
      - General principles P
      - Specific to head and neck including local, regional and distant, simple and compound flaps P
    - Tissue expansion and tissue engineering P
    - Other techniques including cryotherapy, laser ablation, intense pulse light, radiotherapy, hyperbaric treatment etc P
  - Undertake appropriate assessment, surgical procedures, and manage:
    - Aesthetic Facial Surgery:
      - Facelift procedures including simple, SMAS, subperiosteal, endoscopic and adjuvant suspension procedures A
      - Surgical incisions and their indications management of the platysma, submental and malar regions A
      - Ancillary and adjunctive procedures including selective neurectomy (surgical and chemical), liposuction, fat augmentation, implantable agents eg. Collagen, Goretex, Restylane etc, autogenous and allografts, and implant selection, resurfacing with dermabrasion, chemical peels and laser abrasion, sclerotherapy * and vascular* and hair removal*, buccal fat resection, lip lifts, submandibular gland resection and muscle modulators, eg. Botox and cosmetic camouflage. A
      - Manage complications including minimisation and treatment. P
      - Secondary surgery and revisionary procedures. P
    - Aesthetic Brow Surgery:
      - Indications and techniques of brow lift including open, endoscopic and variations A
      - Manage complications including minimisation and treatment P
      - Management of ancillary muscles and / or neural procedures A
    - Aesthetic Submental & Chin Surgery:
      - Aetiology, assessment, treatment alternatives, including genioplasty (augmentation and reduction using autologous and allograft techniques), platysma and submental fat management. A
      - Manage complications - minimisation and treatment P
      - Secondary surgery and revision procedures P
- Eyelids:
  - Pathophysiology, embryology, anatomy and abnormalities and the diagnosis, investigation and treatment and reconstruction of:
    - Congenital deformities C
    - Acquired deformities
      - Trauma T
      - Tumour N
      - Ageing D
      - Tear formation and drainage
  - Upper and Lower Eyelid Blepharoplasty
    - Incisions, indications, complications A
    - Variations with particular reference to skin, conjunctiva, tarsal plate, muscle and fat and orbital septal management A
    - Canthoplasty/pexy and adjunctive/ancillary procedures including laser abrasion, augmentation, chemical peel, dacrocystrhynostomy* A
  - Specific Conditions involving classification, diagnosis, and treatment of ectropion, entropion*, ptosis*, and racial differences A
  - Manage complications - minimisation and treatment P

- Ears:
  - Pathophysiology, embryology, anatomy and abnormalities and the diagnosis, investigation and treatment of:
    - Congenital deformities C
    - Acquired deformities
      - Trauma T
      - Tumour N
      - Ageing D
    - Associated syndromes C
  - Reconstructive procedures for complete and partial ear absence and earlobe loss C/N/T
  - Aesthetic procedures of the ear and ear lobes A
  - Manage complications - minimisation and treatment P

- Nose:
  - Pathophysiology, embryology and development, anatomy and abnormalities and the diagnosis, investigation and treatment of:
    - Congenital deformities C
    - Acquired deformities
      - Trauma T
      - Tumour N
      - Ageing D
    - Associated syndromes C
  - Identify, diagnose and treat associated conditions eg allergic or vasomotor rhinitis, epistaxis*, polyps*, turbinates*, septum*
  - Surgical reconstructive techniques P
  - Surgical aesthetic rhinoplasty techniques A
  - Septoplasty*, turbinate*, and paranasal surgery* P
  - Treatment options of augmentation of the traumatic, congenital or racial deformity and materials available (autogenous versus alloplastic)
  - Manage Complications - minimisation and treatment P

- Lips:
  - Pathophysiology, embryology and development, anatomy and abnormalities and the diagnosis, investigation and treatment of:
    - Congenital deformities C
    - Acquired deformities
      - Trauma T
      - Tumour N
      - Ageing D
    - Associated syndromes C
  - Surgical reconstructive techniques P
  - Surgical and aesthetic enhancement techniques for congenital, aesthetic, and racial conditions A
  - Secondary revisionary procedures P
  - Adjuvant techniques including peels, laser abrasion, implantable and injectable materials - alloplastic versus autologous including fat injection

- Hair Bearing Tissues:
  - Ablative *, reconstructive, and transplantation techniques of scalp and brow and other areas. P

Outline Knowledge

A thorough knowledge, understanding, and surgical ability to treat all the points in the Core Area is expected. However, as Plastic and Reconstructive Surgery is an evolving and changing area, and practised differently in various centres, some areas may be assessed to an outline level of knowledge, i.e. the principles are required but not to the detailed knowledge such that a candidate would be in a position to manage the condition alone, although may be capable. Therefore, trainees are expected to be able to discuss the outline of the management of topics in the core knowledge indicated by *