Subject Outline: Cosmetic Dermatology IV

Course: Graduate Certificate in Cosmetic Dermatology

Subject: Cosmetic Dermatology IV: Injectables (Neurotoxins and Fillers)

Credit Points: 3

Year/Semester Delivered: 1

Pre requisite: Cosmetic Dermatology I: An Introduction and Cosmetic Dermatology II: The Cosmetic Consultation.

Subject Outline:

This subject will cover the various key aspects of the use of injectables in current cosmetic dermatological practice.

Components that comprise the subject may be divided into 4 broad sections:

- Anaesthesia
- Neurotoxins
- Tissue Augmentation
- Other injectables

A: Anaesthesia:

  a. Topical agents
  b. Vibration, cooling and other aids
  c. Nerve blocks

B: Neurotoxins (excluding treatment):

  a. Science of neurotoxins including but not limited to:
     i. Mode of action in neuroglandular and neuromuscular junctions
     ii. Motor endplates
  b. Botulinum toxin including but not limited to:
     i. Different serotypes and their relevance
     ii. Dose equivalence
     iii. Claims and indications
c. Preparation for injection of toxins
d. Indications:
   i. Glandular including but not limited to:
      1. Hyperhidrosis
      2. Salivary glands (parotid and submandibular)
   ii. Muscular including but not limited to:
      1. Wrinkles and expression lines
      2. Microbotulinum injections
      3. Facial shaping
   iii. Pain syndromes and depression

C: Tissue Augmentation

a. Classification and introductory description of current tissue augmentation agents including but not limited to:
   i. Fat
   ii. Ca hydroxyapatite
   iii. Polylactic acid
b. Injection techniques (systematically)
   i. Linear threading
   ii. Retrograde
   iii. Antegrade
   iv. Fanning
   v. Ferning
   vi. Depot
   vii. tower
c. Needles and cannulas
   i. Description
   ii. Benefits
   iii. Risks

D: Other injectables

a. Fat dissolving substances

Successful completion of this subject will provide the student with a strong foundational knowledge in the areas of the anaesthesia, tissue augmentation techniques, the use and role of neurotoxins and other injectables as they apply to the field of cosmetic dermatology.

This subject is supported by an online module containing topic content, additional resources (including but not limited to, additional readings and/or pre-readings, online references, self-diagnostic quizzes images etc.).
Subject Learning Outcomes:

After completing this subject, students will be able to:

**SLO 1:** Examine anaesthetic considerations supporting the use of injectables in cosmetic dermatological practice.

**SLO 2:** Analyse the characteristics and role of Botulinum toxin in treating cosmetic conditions.

**SLO 3:** Critically assess the characteristics and role of dermal fillers in treating cosmetic conditions.

**SLO 4:** Formulate injectable treatment plans for the cosmetic patient utilizing a comprehensive understanding of the products to be used and the risks associated with their use.

**SLO 5:** Formulate treatment plans for fat dissolving injections

The online module may also, where appropriate, contain additional related learning outcomes specific to the component sections.
Student Workload:

In general, “Over a semester, a 3 Credit Point (CP) subject will have a total of at least 36 hours timetabled teaching/student contact time associated with it.”

Generally, this time will be comprised of a mix of online virtual classroom teaching sessions (approx. 80%) and work-place based instruction and/or assessment if or where appropriate.

“1CP will equate to a minimum of 2.5 hours personal study time per week for the full time student. Over a semester (20 weeks) this equates to 150 hours of personal study time for a 3 CP subject”.

As this graduate certificate course is essentially an online course with respect to ‘interaction with content/theoretical concepts’, students will be expected to spend a considerable portion of their personal study time per week over the semester period of 20 weeks working in the respective subject online support modules.

Timetabled student contact/teaching time will be focused on extension of the content of the course that is provided via the online modules.

Teaching:

- Weekly scheduled virtual F2F classroom teaching sessions (utilizing synchronous webinar technology and asynchronous discussion space systems where appropriate)
- Access to topic specific recorded lectures via e-learning portal
- Student self-study using online content support materials
- Work-placed based instruction and/or assessment if or where appropriate.
Assessment:

Assessment of the student outcomes may utilise any or all of the tools listed as appropriate.

- Formal MCQs
- Written Assignment(s) (Reports/reflections etc.,)
- Virtual classroom contributions
- Case based discussion/report (Topics nominated from sections)
- Research/Journal paper analysis/reflection

<table>
<thead>
<tr>
<th>Assessment task</th>
<th>Weight</th>
<th>Subject Learning outcomes assessed</th>
<th>Curriculum Learning Outcomes</th>
<th>Due date</th>
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<tbody>
<tr>
<td>MCQ Exam/Quizzes</td>
<td>50%</td>
<td>SLO 1, 3 - 5</td>
<td>CLO 1 - 6</td>
<td>TBA**</td>
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<tr>
<td>Assignment 1: Case Report(s) 1* - Anaesthesia</td>
<td>10%</td>
<td>SLO 1, 3 - 5</td>
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<td>Assignment 2: Case Report(s) 2* - Neurotoxins</td>
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<td>Assignment 2: Case Report(s) 3* - Tissue Augmentation</td>
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<td>CLO 1 - 6</td>
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<td>Assignment 3: Research Report: Botulinum usage in cosmetic situations</td>
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<td>SLO 2</td>
<td>CLO 7</td>
<td>TBA**</td>
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<td>Virtual Classroom participation/contribution</td>
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<td>SLO 1, 3 - 5</td>
<td>CLO 1 - 6</td>
<td>Weekly</td>
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</tbody>
</table>

* Case study reports must be comprehensive and must as a minimum include:

- Patient history summary
- Examination findings/ assessment and consequent differential diagnoses
- Treatment plan(s)
- Risk analysis
- Images if appropriate (consented)

** Dates for submission will be confirmed during the first course session. Care will be taken to ensure, where possible, that submission dates are spread across the full course session (20 weeks)
Recommended Resources:

General (Covering all sections)
- Surgery of the Skin; Robinson et al.
- Procedures in Cosmetic Dermatology Series (Various)

Section Specific resources:

Anaesthesia
- Refer to the online module for additional Journal Readings

Neurotoxins
- As above
- Procedures in Cosmetic Dermatology Series: 2006 Elsevier London Chapters: 20 (Facial redness)
- Carruthers A and Carruthers J, Procedures in Cosmetic Dermatology - Botulinum Toxin, 2005,Elsevier Saunders, Philadelphia, USA
- Dermatologic Surgery, 2013, Special CME Article The Convergence of Medicines and Neurotoxins: A Focus on Botulinum Toxin Type A and It's Application in Aesthetic Medicine, Vol 39 Number 3 Part ISSN 1076-0512
- Refer to the online module for additional Journal Readings

Tissue Augmentation
- Robinson Tierney E, Sengelmann, Sattler G & Williams, C. Surgery of the skin, 2nd edition 2014; chap 23
- Allergan
- Galderma
- Refer to the online module for additional Journal Readings

**Other injectables**
Curriculum Mapping:

**CDIII: Surface Active Procedures**

Successful completion of this subject will provide the student with a strong foundational knowledge in the areas of the anaesthesia, tissue augmentation options and techniques, the use and role of neurotoxins and other injectables as they apply to the field of cosmetic dermatology.

**Course Learning Outcomes**

**CLOC 1:** Demonstrate the development of an appropriate knowledge base in the field of Cosmetic Dermatology.

**CLOC 2:** Demonstrate a comprehensive understanding of the cosmetic consultation, patient selection and rights.

**CLOC 3:** Demonstrate a comprehensive understanding of the treatment options available to the cosmetic patient.

**CLOC 4:** Utilise an evidence based approach to analysis of patient needs.

**CLOC 5:** Formulate cosmetic treatment plans by synthesizing a detailed knowledge of facial anatomy and a comparison of treatment modalities.

**CLOC 6:** Distinguish between cosmetic treatments by assessing their probable outcomes against potential risks.

**CLOC 7:** Critically appraise current practice and/or research in the domain of cosmetic dermatology and its various sub-domains

**Subject Learning Outcomes**

**SLO 1:** Examine anaesthetic considerations supporting the use of injectables in cosmetic dermatological practice.

**SLO 2:** Analyse the characteristics and role of Botulinum toxin in treating cosmetic conditions.

**SLO 3:** Critically assess the characteristics and role of dermal fillers in treating cosmetic conditions.

**SLO 4:** Formulate injectable treatment plans for the cosmetic patient utilizing a comprehensive understanding of the products to be used and the risks associated with their use.

**SLO 5:** Formulate treatment plans for fat dissolving injections