

Subject Outline: Cosmetic Dermatology IV



THE AUSTRALASIAN COLLEGE
OF DERMATOLOGISTS

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. Fanning
 - 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

Assessment task	Weight	Subject Learning outcomes assessed	Curriculum Learning Outcomes	Due date
MCQ Exam/Quizzes	50%	SLO 1, 3 - 5	CLO 1 - 6	TBA
Assignment 1: Case Report(s) 1* - Anaesthesia	10%	SLO 1, 3 - 5	CLO 1 - 6	TBA
Assignment 2: Case Report(s) 2* - Neurotoxins	10%	SLO 1, 3 - 5	CLO 1 - 6	TBA
Assignment 2: Case Report(s) 3* - Tissue Augmentation	10%	SLO 1, 3 - 5	CLO 1 - 6	TBA
Assignment 3: Research Report: Botulinum usage in cosmetic situations	15%	SLO 2	CLO 7	TBA
Virtual Classroom participation/contribution	5%	SLO 1, 3 - 5	CLO 1 - 6	Weekly

* **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)

Refer also to the Portfolio/Logbook Assessment/Evaluation Rubric for more detailed guidance on requirements.

Recommended Resources:

General (Covering all sections)

- Cosmetic Dermatology: Alam, Hayes, Gladstone and Tung. ISBN: 978-0-7020-3143-4
- Surgery of the Skin; Robinson et al.
- Procedures in Cosmetic Dermatology Series (Various)

Section Specific resources:

Anaesthesia

- Robinson J.K et al., Surgery of the Skin 2nd Edition. 2010 Elsevier.
- Guidelines for the use of local anaesthesia in office-based dermatologic surgery. JAAD 2016. Vol 74, Issue 6, p 1201-1219
- Topical anaesthetics for dermatologic procedures: A Review. Alster et al. Dermatol Surg 2012; 1-13
- 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
- Kane M, Donofrio L, Ascher B, Hexel D, et al. Expanding the use of neurotoxins in facial aesthetics: a consensus panel's assessment and recommendations. J Drugs Dermatol 2010; 9: 7-22
- Carruthers A, Carruthers J, Cohen J. Dilution volume of botulinum toxin type A for the treatment of glabella rhytids: Does it matter? Dermatol Surg 2007; 33: S97-104
- De Almeida AR, Secco L, Carruthers A. Handling Botulinum toxins: An updated literature review. Dermatol Surg 2011; 37: 1553-65
- https://hcp.botoxcosmetic.com/~media/Unique%20Sites/BotoxCosmeticHCP/Files/PDFs/Dilution_Reconstitution_Injection_Guide.pdf
- Refer to the online module for additional Journal Readings

Tissue Augmentation

- Carruthers J & A. Procedures in Cosmetic Dermatology: Soft tissue augmentation, 3rd edition 2012.
- Robinson Tierney E, Sengelmann, Sattler G & Williams, C. Surgery of the skin, 2nd edition 2014; chap 23
- Gold, M. The science and art of hyaluronic acid dermal filler use in esthetic applications. Journal of Cosmetic Dermatology, 2009;8:301-307.
- Monheit G, Coleman K. Hyaluronic acid fillers. Dermatology Therapy, Vol 19, 2006;141-150.
- Buck D, Alam M, Kim J. Injectable fillers for facail refuvination: a reveiw. Journal of Plastic, Reconstructive & Aesthetic Surgery 2009; 62:11-18.

- Sanchez-Carpintero I, Candelas D, Ruiz-Rodriguez R. Dermal fillers:Types, Indications and Complications. *Actas Dermosifiliogr* 2010; 101(5)381-393.
- Muhn C, Rosen N, Solish N et al. The evolving role of hyaluronic acid fillers in facial volume restoration and contouring. A Canadian overview. *Clinical, Cosmetic and Investigational Dermatology*,2012;5:147-158
- Kusin S, Lippitz J. Skin Fillers. *Dis Mon*,2009;55:236-256
- Allergan
- Galderma
- Refer to the online module for additional Journal Readings

Other injectables

- Carruthers, J Coleman K. Special Issue: Deoxycholic Acid Injection Treatment for Reduction of Submental Fat. *Dermatol Surg* 2016;42:S259
- Dayan, S HY et.al., Overview of ATX-101 (Deoxycholic Acid Injection): A Nonsurgical Approach for Reduction of Submental Fat. *Dermatol Surg* 2016;42:S263-S270
- Dover J S. et al., Management of Patient Experience with ATX-101 (Deoxycholic Acid Injection) for reduction of Submental Fat *Dermatol Surg* 2016;42:S288-S299
- Goodman J et al., Beauty from the Neck Up: Introduction to the Special Issue *Dermatol Surg* 2016;42:S260 –S262
- Jones D H. et al., Proper Techniques for Administration of ATX-101 (Deoxycholic Acid Injection): Insights from an Injection Practicum and Roundtable Discussion *Dermatol Surg* 2016;42:S275 - S281
- Kenkel J M. et al., Anatomy of the Cervicomental Region: Insights from an Anatomy Laboratory and Roundtable Discussion *Dermatol Surg* 2016;42:S282 – S287

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.
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