

## Subject Outline: Elective B – Contact Dermatitis and Patch-Testing



THE AUSTRALASIAN COLLEGE  
OF DERMATOLOGISTS

**Course:** Master of Dermatology (Coursework)

**Subject:** Elective B: Contact Dermatitis and Patch-Testing

**Credit Points:** 4

**Year/Semester Delivered:** 2/4

### Subject Outline:

This subject is divided into two sections, contact dermatitis and the diagnostic tool patch-testing. The subject builds on knowledge and skills already developed by students in the clinical, medical and procedural dermatological domains in the specific context of babies and very young children.

#### *Contact dermatitis.*

Broad areas covered will include:

- pathophysiologic mechanisms of contact dermatitis
- delayed and immediate reactions
- patterns of contact dermatitis
  - eczematous reactions
  - lichenoid,
  - pustular,
  - erythema multiform-like,
  - pseudolymphomatoid,
  - granulomatous and pigmented reactions, and
  - an introduction to the main procedures (skin tests) used for their etiologic diagnosis

#### *Patch testing.*

Broad areas covered will include:

- Performing and Interpreting Patch Tests
  - When indicated
  - Indications
  - Requirements
  - Patch testing systems (Chamber, TRUE Test)
  - Methodology
  - Scoring
  - Irritant vs allergic reactions
  - False positives/negatives
  - Informing patients
  - Risks
- Range of available allergens

- Choice of allergens
- The concept of the 'Standard Series'
- Specialised Series
- Testing 'own products'
- Other forms of testing
- European Baseline Series (groups of allergens)
  - Metals
  - Medications
  - Preservatives
  - Fragrances and Flavours
  - Plant Allergens
  - Resins
  - Dyes

This subject is supported by an online module, containing a range of activities centred on recorded visual/audio presentations, case studies, readings, research papers.

### **Learning Outcomes:**

After completing this subject, students will be able to:

1. Assess patients for contact dermatitis
2. Determine likely causative agents involved in a patient's dermatitis from a detailed history
3. Advise patients of treatment/management pathways.
4. Demonstrate an understanding of the indicators for patch testing
5. Demonstrate an understanding of the conditions that must be met for patch testing to be appropriately undertaken.
6. Identify the risks and potential adverse effects of patch testing
7. Select the most appropriate system which can be used for patch testing (eg chamber systems versus pre-prepared allergen kits)
8. Evaluate when testing with the 'standard series' may be inadequate.
9. Demonstrate an understanding of how to approach testing against patient's own products.
10. Perform patch testing.
11. Correctly read patch tests, including distinguishing between irritant and allergic reactions, and grading of patch test reactions.
12. Interpret patch test results in light of the patient's clinical presentation and determine the relevance of positive patch test reactions.
13. Demonstrate a working understanding of how a patient should be counselled and educated about the outcome of patch testing.
14. Demonstrate a basic knowledge of the allergens in the European standard series, and how each of them may be clinically relevant.
15. Research and critically report on the issue of cutaneous reactions to metals used in orthopaedic implants. Address whether the following statement is controversial 'Cutaneous reactions are the dominant symptom associated with hypersensitivity responses to implanted orthopaedic devices is controversial'.

### **Student Workload:**

The following extract for the ACD Academic Awards Framework Policy should be used as a guide to the minimum time a student should spend working on this subject.

“A 4 credit point subject will have a minimum of 48 hours teaching time associated with it ...” per semester.

“1CP will equate to a minimum of 2.5 hours personal study time per week for the student. Over a semester (20 weeks) this equates to 200 hours of personal study time for a 4 CP subject”.

### **Teaching:**

- Weekly F2F tutorial clinical teaching sessions
- Weekly Virtual classroom sessions (Includes contribution to online case based discussion)
- Online Pre-recorded tutorial presentations (with audio)
- Student self-paced online study.

**Assessment:**

- Formal MCQ
- Written Assignments/Research Report
- WpBA (Selected)
- Virtual classroom contributions

Assessment task	Weight	Subject Learning outcomes assessed	Curriculum Learning Outcomes	Due date
MCQs	30%	4,5,9, 11-14	BLO 2-5/LO 2-8 BLO 6-7/LO 9-10, 12-14, 17-18	TBA
Written Assignment 1:	15%	1,2,3, 11-14	BLO 2-5/LO 2-8 BLO 6-7/LO 9-10, 12-14, 17-18 BLO 10/LO 22	TBA
Written Assignment 2:	15%	1,2,3, 11-14	BLO 2-5/LO 2-8 BLO 6-7/LO 9-10, 12-14, 17-18 BLO 10/LO 22	TBA
Written Assignment Scenario Report: 1	15%	1,2,3, 11-14	BLO 2-5/LO 2-8 BLO 6-7/LO 9-10, 12-14, 17-18 BLO 10/LO 22	TBA
Written Assignment Scenario Report 2	10%	1,2,3, 11-14	BLO 4/LO7	TBA
Written Assignment 3: Research report	10%	15	BLO 2-5/LO 2-8	TBA
Discussion: Virtual classroom case based discussion contribution	5%	All	All	Assessed Weekly

Competency based:  
WpBA\*

DermCEX Patch testing	C/NC	All	All	By arrangement
ProDA Patch testing	C/NC	All	All	By arrangement
DermCEX Disorders of physical agents	C/NC	1-8	All	By arrangement

**Recommended Resources:**

Each online tutorial:

- References appropriate research and journal articles. These should be accessed and reviewed in all cases.
- Contains contextualized inbuilt case studies and journal article download links
- Audio supported powerpoint presentations.

Additionally, you are advised to access the appropriate sections of the standard texts:

- Burns T, Breathnach S, Cox N and Griffiths C (eds). *Rook's Textbook of Dermatology*, 8<sup>th</sup> edn. Chichester: Wiley-Blackwell, 2010.
- Bologna JL, Jorizzo JL, Schaffer JV (eds). *Dermatology*, 3<sup>rd</sup> edn, revised. London: Saunders, 2012.
- Goldsmith LA, Katz SI, Gilchrest BA, Paller A, Leffell DJ and Wolff K. *Fitzpatrick's Dermatology in General Medicine*, 8<sup>th</sup> edn revised. New York: McGraw-Hill Medical.

## Curriculum Mapping:

### DOMAIN 2: Medical Dermatology (Fundamentals of Clinical Practice)

**BLO 2:** Critically assess patients, by generating an accurate history and through a systematic and comprehensive clinical examination.

**BLO 3:** Critically assess and synthesise specialist medical dermatological knowledge of disease process, presentation and epidemiology to develop effective differential diagnoses.

**BLO 4:** Critically analyse the need for and use of appropriate investigations to develop and justify well-reasoned clinical diagnoses.

**BLO 5:** Evaluate results of investigations and employ clinicopathologic correlation to then develop and assess effective management plans appropriate to the diagnosis and the patient's context.

### Learning outcomes

**LO 2:** Develop a therapeutic relationship with the patient and carers as appropriate.

**LO 3:** Generate a comprehensive relevant history from the patient and carers, as appropriate.

**LO 4:** Create an appropriate context for informed consent.

**LO 5:** Assess a patient's condition through a systematic and comprehensive patient examination.

**LO 6:** Formulate sound clinical decisions and differential diagnoses through the application of dermatological knowledge and skills to both the assessment of a patient's condition and appropriate diagnostic investigations.

**LO 7:** Evaluate evidence-based medicine and relevant research methodology in clinical, case-based dermatology.

**LO 8:** Create, implement and evaluate effective treatment management plans, taking into account the patient's condition and context.

### DOMAIN 3: Procedural Dermatology (Specialist Procedures)

**BLO 6:** Critically apply specialist medical knowledge and diagnostic skills to develop best practice treatment options in procedural dermatology

**BLO 7:** Synthesise anatomical understanding of the skin and underlying soft tissues with technical skills in the performance of dermatological procedures using aseptic technique

### Learning outcomes

**LO 9:** Evaluate a patient's condition before performing dermatological procedures, including creating context for informed consent from the patient and/or appropriate carer(s), in accordance with current legislation.

**LO10:** Develop a thorough anatomical understanding of the skin and underlying soft tissues and apply this knowledge base to the performance of dermatological procedures.

**LO 12:** Evaluate instruments, materials and equipment to perform dermatological procedures safely and effectively.

**LO 13:** Generate safe and effective preparations for dermatological procedures using aseptic technique.

**LO 14:** Develop appropriate technical skills in the performance of safe and effective dermatological procedures.

**LO 17:** Comprehensively design and implement after-care and follow-up post-procedural plans and procedures.

**LO 18:** Evaluate and design mitigating measures for post-operative complications following dermatological procedures.

### DOMAIN 4: Professional Qualities (Quality and Safety)

**BLO 10:** Design and deliver safe, high quality health care and research according to ethical codes of practice and legal obligations

**Learning outcomes**

**LO 22:** Design and deliver quality and safety standards to ensure patients receive safe, high quality care.