



EWMA Educational Development Programme

Curriculum Development Project

Education Module:

Prevention and Management of Leg Ulcers

Latest revision: October 2015



ABOUT THE EWMA EDUCATIONAL DEVELOPMENT PROGRAMME

The Programme is designed to assist students and healthcare professionals who work with patients with wounds and related skin conditions and wish to develop and/or increase their knowledge and skills in order to meet patient needs.

Overall, the Programme aims to:

- Provide students and healthcare professionals with the knowledge and skills to equip them to perform their role in the delivery of optimal wound care.
- Provide contemporary, interdisciplinary, product/brand neutral wound management education that is endorsed by EWMA.
- Provide quality standards against which other organisations can evaluate existing wound management programmes.
- Achieve European acceptance by developing an educational framework that is in line with European Commission educational initiatives in order to disseminate best practice in wound care.

ABOUT THE CURRICULUM DEVELOPMENT PROJECT

The Curriculum Development Project is at the heart of the Educational Development Programme. The aim of the Project is to develop a flexible curriculum, consisting of a number of modules.

All modules are based on a standard template but individually focused on a specific aspect of wound management. Each module is developed by a small group consisting of members of the EWMA Education Committee and/or affiliated wound care key specialists. For an updated list of the currently available modules please visit the education sub page at www.ewma.org.

ABOUT THIS MODULE

The Prevention and Management of Leg Ulcers module aims to:

- Broaden participant's knowledge and understanding of the management of leg ulcers and associated diseases.
- Evaluate strategies to promote effective inter-professional collaborative working for patients with leg ulcers.



MODULE CONTENT

1. Elaborating Body

European Wound Management Association (EWMA)

2. Date of production of module

January 2003

3. Latest review date

October 2015

4. Module intended learning outcomes

This module provides opportunities for health professionals to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas:

A. Intellectual Skills – Knowledge and Understanding

Participants will have knowledge of:

1. Anatomy and physiology of the lower limb.
2. Causes and pathophysiology of leg ulceration.
3. Epidemiology of leg ulceration and its impact on health service provision.
4. Management strategies for leg ulceration including wound management; pain management; skin care; compression - bandaging / hosiery / intermittent & preventative interventions including surgery.
5. Evidence-based treatments available for the management of leg ulceration and associated skin conditions.
6. Organisation of leg ulcer services and interdisciplinary team working.
7. Health economics related to leg ulcers and treatment of leg ulceration.

B. Practical Skills – Skills and Attributes:

Participants will be able to:

1. Effectively use clinical assessment skills for patients with leg ulceration.
2. Make effective treatment decisions, initiate further investigations and know when to refer to specialist services.
3. Safely and effectively apply compression bandages and hosiery.
5. Identify and manage the psychosocial impact of leg ulceration.
6. Evaluate the provision of leg ulcer services.



5. Teaching/learning methods & strategies

Acquisition of 4.A & 4.B (see above) is through a combination of lectures, small group workshops and learning in practice throughout the module. There is also the possibility of using e-learning in combination with traditional learning methods. Throughout, the participant is encouraged to undertake independent study to both supplement and consolidate what is being taught and to broaden individual knowledge and understanding of the subject.

6. Assessment methods

Assessment methods will need to vary for each professional group. Understanding will be assessed in a variety of ways i.e. open discussion, formal written exercises, case studies, practice work-books. Throughout, the learner is expected to consolidate the development of practical skills / management skills in the clinical setting.

7. Unit content

A. Overview / epidemiology

Incidence and prevalence data for leg ulcers and associated conditions

Causes of leg ulceration – venous, arterial, mixed, infectious, inflammatory, neoplasm etc.

Evidence base for leg ulcer management - national/international guidelines

Cost effectiveness

The health economic costs associated with leg ulcers and treatment of leg ulceration.

B. Anatomy of lower limb

Vascular arteries, veins, capillaries

Lymphatic system

Skin and associated structures

C. Pathophysiology

Vascular – macro-circulation, DVT, valve incompetence, micro-circulation, arteriosclerosis, vasculitis

Venous hypertension / insufficiency, lipodermatosclerosis, atrophie blanche

Venous disease – White Cell Trapping, Fibrin Cuff theories

Lymphatic disease – congenital, post-traumatic, venous disease, neoplastic disease, obesity etc

Formation of oedema

D. Principles of patient care

Assessment – physical, psychological, social

Identification of patient-centred management objectives

Care planning



Evaluation of outcomes

Use of evidence based practice/clinical guidelines

Referral criteria

Interdisciplinary team working

E. Assessment

General assessment process – limb, person

Quality of life

Differential diagnosis – DVT, red leg

Vascular assessment - palpation foot pulses, ankle brachial pressure index, segmental pressures etc

Investigations – blood screening, microbiology, biopsy

Skin assessment

F. Risk factor management

Identification of risk factors -DVT, phlebitis, oedema, eczema, lipodermatosclerosis - smoking, hypertension, Peripheral Vascular Disease etc

Symptomatic control & management - hypertension, diabetes, obesity

G. Ulcer Management

Management of venous disease –compression bandaging / hosiery, intermittent compression

Management of arterial / mixed disease – modified compression, skin care, referral criteria

Vascular management – smoking, hypertension, diet

Management of vasculitic ulcers

Management of other types of ulcer - post cellulitic, neoplasm, trauma, pyoderma gangrenosum etc

Pain management – assessment / control

H. Wound management for leg ulcers

Management strategies for leg ulcers including the use of wound management products and adjunct therapies

The use of guidelines and evidence-based practice to treat leg ulcers

Assessment of the wound bed and surrounding skin

Principles of cleansing

Selection of cleansing agents

Debridement and wound bed preparation including surgical debridement, dressings promoting autolytic debridement, use of bio surgery and topical negative pressure therapy

Dressing selection including product availability relative to local circumstances and different healthcare settings

Advanced wound care products/techniques e.g. skin grafts, skin substitutes, growth factors

Pain management to ensure effective assessment and evaluation of outcomes including the use of analgesia

Care of the surrounding skin e.g. varicose eczema, hyperkeratosis, contact dermatitis, avoidance of trauma/skin stripping, maceration, blistering and allergies

I. Management of infection

Assessment / presentation wound infection/cellulitis - clinical signs/symptoms, biofilm, subclinical, local and systemic infection, differential diagnosis of red leg

Methods to identify infecting agents – clinical signs, sensitivity and specificity of culture and swab techniques, biopsy

Radiological and other investigations – Magnetic Resonance Scans

Antibiotic therapy - indications, type and duration of treatment

Use of topical antimicrobials - indications, type and duration of treatment

J. Specialist interventions

Vascular investigations – Duplex Scanning, Photo-plethysmography

Surgical techniques in arterial / venous disease – vein stripping, bypass, ulcer shaving, amputation

Skin patch testing

K. Systemic and local pharmacological management

Use of:

- Steroids
- ACE inhibitors, anti-platelet agents
- Analgesia
- Antibiotics / antimicrobials
- Anti-pruritics
- Emollients and barrier creams

L. Leg ulcer services

Structure and management – care at home, outpatient clinics, outreach services, social models of care for example Leg Clubs

Integrated hospital and community care

Inter-disciplinary, multi-professional team approach, patient involvement in care

Patient follow-up / prevention of reoccurrence

M. Psychosocial aspects of care

Impact of leg ulcers on individual & society e.g. odour and leakage



Factors affecting compliance with treatment including case study examples of barriers to providing effective treatment to individuals

Effective patient education strategies- exercise, weight control, maintenance of compression, skin care, smoking cessation, management of hypertension etc.

8. Unit specific learning resources

Books

Leg Ulcers A problem –Based Learning Approach; Moya Morison, Christine Moffatt, Peter Franks, Mosby 2007

Leg Ulcers: Christine Moffatt & Peter Harper Access to Clinical Education. Churchill Livingstone 1997

Leg Ulcer Management (Essential Clinical Skills for Nurses) Paperback – 12 Apr 2007 by Christine Moffatt (Author), Ruth Martin (Author), Rachael Smithdale (Author)

Journals

Journal of Wound Care

Phlebology

International Journal of Lower Extremity Wounds

International Wound Journal

Ostomy and Wound Management?

Wounds

Journal of Tissue Viability

Journal of Vascular Surgery

Web links

Cochrane <http://www.cochrane.org/index>

NICE: <https://www.evidence.nhs.uk/Search?q=leg+ulcer+guidelines>

Scottish Intercollegiate Guideline Network: <http://sign.ac.uk/guidelines/fulltext/120/index.html>

Wounds International: <http://www.woundsinternational.com/resources/leg-ulcers>

Wounds International: http://www.woundsinternational.com/media/other-resources/_/1186/files/3m_14_4_consensus_web.pdf

Wounds UK: <http://www.wounds-uk.com/best-practice-statements>