Assessing and Managing Painful Chronic Wounds

A Pocket Guide

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Biatain - Ibu

Coloplast

Introduction

The authors and Coloplast A/S hope that this pocket guide will help you assess and manage pain as part of wound management. Assessment and management of pain should be part of a holistic approach to wound management, as pain affects patients' quality of life and wound healing potential.
By reducing barriers to wound healing the goal is to facilitate faster wound healing whenever possible.

Pain Management in Chronic Wounds

Many patients with chronic wounds experience chronic pain that affects their quality of life and wound healing potential. Each patient's pain experience is unique. The plan of care must be individualised.

The holistic Wound Pain Management Model includes:

- **Wound Assessment**
- **Local Wound Management**
- **Wound Pain Assessment**
- **Wound Pain Management**

"Anyone in pain is locked in a struggle for relief. The rest of us have the option of approach or retreat"

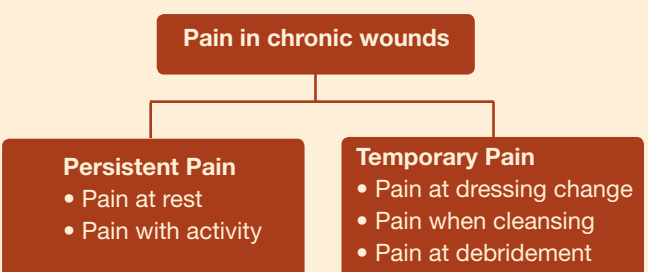
(Wall 1984)

The Cause of Pain in Chronic Wounds

Tissue damage → Nociceptive pain
Nerve damage → Neuropathic pain
Fear and anxiety → Psychogenic pain

Pain in chronic wounds is often a combination of both nociceptive, neuropathic and psychogenic pain.

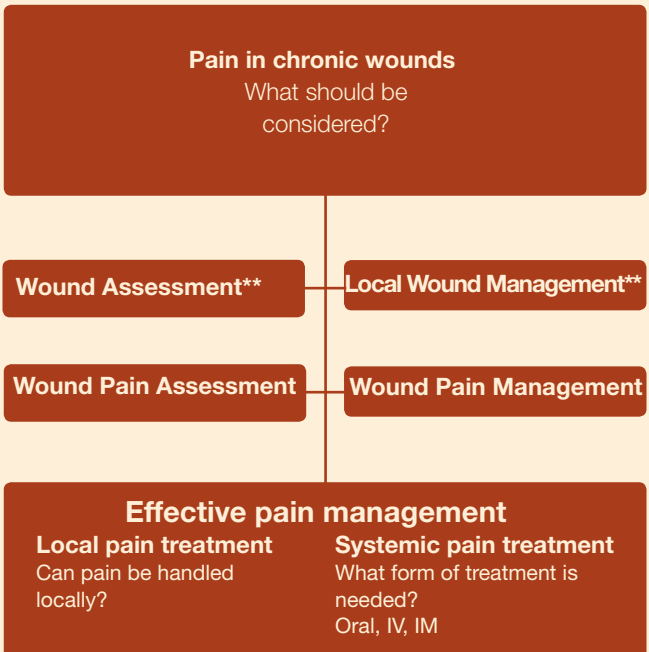
The patient may experience persistent pain and/or temporary pain.



"Pain is whatever the person experiencing it says it is and exists whenever he says it does"

(McCaffery 1999)

The Pain Guide in Chronic Wounds*



* (For further information see Appendix 1)

** Price P, Fogh K, Glynn C, Krasner D, Osterbrink J, and Sibbald RG. Managing painful chronic wounds: the Wound Pain Management Model. International Wound Journal. 2007, 4 (suppl. 1), 4-14.

Pain assessment in Chronic Wounds

	Questions	Explanation
Location	Where is the pain located: In the wound bed? In the area surrounding the wound? Another location in the region of the wound? Is the pain unrelated to the wound?	The localisation of the pain is the first step in determining the cause of the pain and directing appropriate investigations and treatments.
Duration	How long has the pain been experienced? Is the pain persistent? (at rest or with activities?) Is the pain temporary? (Procedurally : At dressing change, during cleansing and debridement).	A change in the pain suggests the need for a reassessment.
Intensity	How strong is chronic wound pain on a scale from 0 to 10 (0 = no pain, 10 = worst pain).	Pain is subjective and should be treated based on the patient's symptoms. Pain measurement scales should be used to monitor the development of pain and the patient's response to treatment.
Quality	Ask the patients to describe their wound pain. Is it: Aching, throbbing, gnawing, tender (nociceptive). Burning, stinging, shooting, stabbing (neuropathic).	It is important to match the treatment of pain to its characteristics: Many patients may have both nociceptive and neuropathic pain.
Increased or new onset of pain	Reassess: Has the wound changed? Increased size or other signs and symptoms (increased inflammation, infection, cellulitis, etc.)	If the wound is painful and has signs of local colonisation/infection, it is important to treat the cause.
Activities of daily living	How does the patient's chronic wound pain interfere with their: Usual activities? Sleep? Ability to move around? Appetite? Mood?	Effective wound pain management involves activities of daily living.

Pain measurement tools

Scoring pain over time is an effective way to optimise chronic pain management.
Several tools are available. Examples are:

VAS scale - The Visual Analogue Scale

No Pain ——————————— **Worst Pain**

Ask the patient to pick a point on the continuum that best reflects how she/he is feeling.

Numerical rating scale

0 1 2 3 4 5 6 7 8 9 10

Ask the patient to choose a number that best reflects his/her present level of pain. *(0 is no pain and 10 is worst pain)*

Verbal rating scale

No Pain **Mild Pain** **Moderate pain** **Severe pain**

Ask the patient which word best describes his/her current level of pain.

Pain management in chronic wounds[1]

1 Determine the kind(s) of chronic wound pain: persistent/ temporary, nociceptive (tissue damage)/ neuropathic (nerve damage).

2 Treat the possible causes of pain, e.g. infection, uncontrolled oedema.

3 Consider if local non-pharmacological treatment is optimized (listed in table next page). Local treatment may be important for localized persistent wound pain and for painful procedures, such as dressing changes, debridement or localized persistent wound pain.

4 If the pain is not reduced, consider moving to systemic or general treatments.

1. Price P, Fogh K, Glynn C, Krasner D, Osterbrink J, and Sibbald RG. Managing painful chronic wounds: the Wound Pain Management Model. International Wound Journal. 2007, 4 (suppl. 1), 4-14.

Chronic wound pain management should be individualized:

Local Treatment

Non pharmacological treatment:

- Allow procedural time-outs
- Low dose local sustained release ibuprofen foam
- Moisture-balanced dressings
- Autolytic debridement
- Protect surrounding skin
- Minimise wound exposure
- Cleanse with warm water, saline
- Avoid excessive irrigation force
- Avoid adhesive, adherent dressings
- Compression strategy (oedema control)

Other therapies

TENS, Acupuncture

Pharmacological treatment:

Local Anesthetics

Use amide local anesthetics (Xylocaine, Prilocaine)

Avoid ester local anesthetics (Benzacaine)

Systemic Treatment*

If predominantly Nociceptive pain:	**If predominantly Neuropathic pain**
WHO Ladder Step 1: NSAID, Acetominephen (paracetamol) Step 2: Mild opiates (e.g. odeine, tramadol) Step 3: Strong opiates (morphine, hydromorphone, transdermal fentanyl)	Tricyclic Antidepressants/ Anticonvulsants (gabapentin)

*For all drugs, please refer to product monograph and Appendix 3

Biatain – Ibu Foam dressing

Exudate management and release of ibuprofen

Biatain – Ibu Foam dressing is indicated for exuding wounds and may reduce pain caused by tissue damage.

Clinical evidence has shown:

- **Biatain – Ibu** is a unique combination of excellent exudate management and continuous release of ibuprofen[1,2]
- **Biatain – Ibu** may reduce pain during wear time and at dressing changes[1,3,4,7]
- **Biatain – Ibu** releases ibuprofen locally with no observed systemic effect[1]

Biatain – Ibu is built on the **Biatain** foam platform

- **Biatain** provides better exudate management than other foam dressings[5,6]
- **Biatain** ensures minimal leakage and maceration[6]

1. Jørgensen B et al. Wound Repair and Regeneration, 2006, 14,(3) 233-239.
2. Steffansen B et al. European Wound Management Association. Prague, Czech Republic, 2006. Poster.
3. Sibbald RG et al. International Wound Journal, 2007, 4,(suppl. 1) 15-22.
4. Flanagan M et al. World Wide Wounds, 2006, April.
5. Andersen KE et al. Ostomy Wound Management, 2002, 48,(8) 34-41.
6. Thomas S et al. www.dressings.org. www.dressings.org/TechnicalPublications/PDF/Coloplast-Dressings-Testing-2003-2004.pdf. 2005.
7. Gottrup F et al. International Wound Journal, 2007, 4,(suppl.1) 23-33.

Biatain - Ibu range

Biatain - Ibu
Coloplast

Biatain - Ibu Foam Non-adhesive Dressing

Product Code	Size (cm)	Quantity (pcs./retailbox)
4110	10 x 10	5
4112	10 x 20	5
4115	15 x 15	5
4120	20 x 20	5

Biatain - Ibu Foam Soft-Hold Dressing

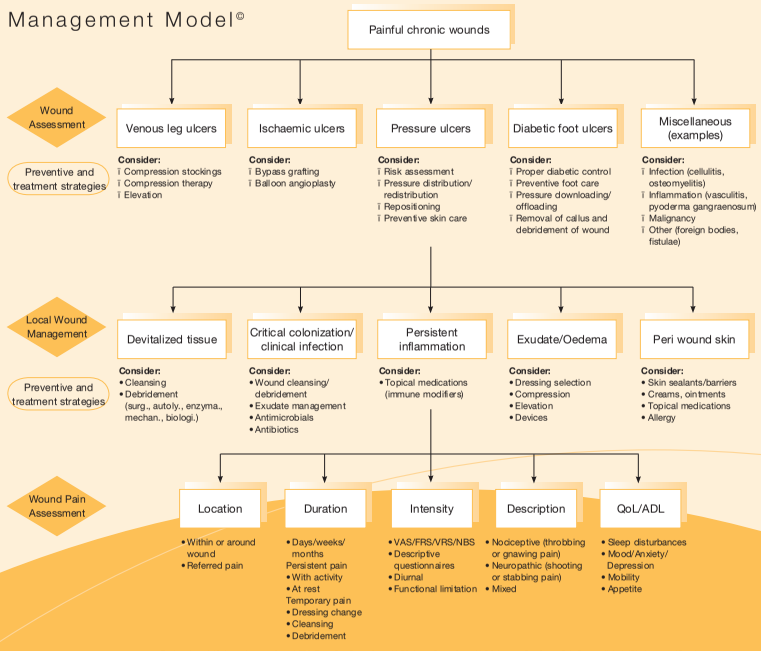
Product Code	Size (cm)	Quantity (pcs./retailbox)
4140	10 x 10	5
4142	10 x 20	5

Biatain – Ibu Foam dressing is indicated for exuding wounds such as leg ulcers, pressure ulcers, diabetic foot ulcers, smaller partial-thickness burns, donor sites, post-operative wounds and skin abrasions*.

* Please see package insert for complete Instructions for Use.

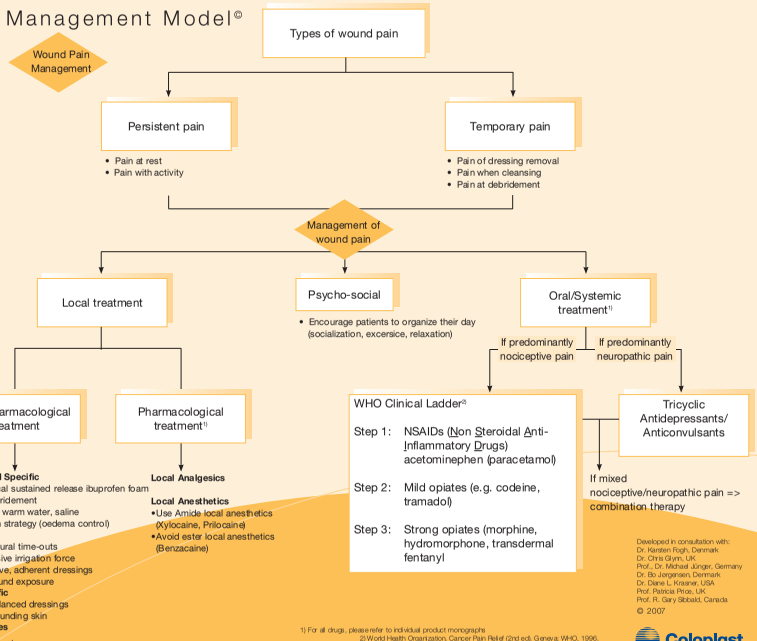
Wound Pain Management Model©

(WPM) © 2007



Wound Pain Management Model©

(WPM) © 2007



1) For all drugs, please refer to individual product monographs
2) World Health Organization, Cancer Pain Relief (2nd ed). Geneva: WHO, 1996.

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For full size model, please visit www.biatain-lbu.coloplast.com

Appendix 2:
Wound diagnosis and strategies

Etiology	History	Physical
Venous Leg Ulcers	• May have family or previous history of venous disease or thrombophlebitis • May have previous pregnancies • Swelling end of day and improved first thing in the morning	• Prominent superficial veins and/or stasis dermatitis, pigment • Palpable pulse • Pitting oedema • Ulcers most common around medial malleolus and lower calf
Arterial (ischemic) Ulcers	• Intermittent claudication • Rest pain, especially with feet up • Smoking history	• Diminished or loss of peripheral pulses • Cold extremity • Dependent rubour • Capillary refill (> 5 secs) • Ulcers distal (forefoot & toes)
Pressure Ulcers	• History of past ulcers • Source of increased pressure • Friction / shear • Moisture • Nutrition • Mobility	• Proximity of ulcer related to pressure points (e.g. bony prominences)
Foot ulcers in patients with diabetes	• Loss of sensation • Bony deformity • Other complicatons due to diabetes	• With neuropathy pulse is present with callus and ulcers over bony prominence • V = pulse • I = infection (swelling/warmth) • P = pressure (callus)

Investigation Strategies	Treatment Strategies	Prevention Strategies
• ABPI > 0.8 • Positive tourniquet test • Duplex Doppler demonstrating valvular insufficiency or thrombosis	• Multilayer and/or high elastic or non-elastic compression therapy • Compression stockings/ bandaging • Elevation	• High elastic or non-elastic compression therapy • Compression stockings • Surgery for superficial or perforated abnormalities (with intact deep system)
• ABPI < 0.6 • Decreased TCPO2/toe pressures • Duplex, Doppler • Angiogram for bypassable or dilatable blockage	• Revascularise • Medical treatment • Warmth (e.g. socks) • Vascular dilation/surgical bypass	• Stop smoking • Graduated excercise • Control hyperlipidemia
• Identify low - CBC - Albumin • Pressure mapping (bed, commode, wheelchair)	• Relieve pressure • Optimize nutrition/anaemia • Improve transfers	• Minimize friction/ shear • Relieve pressure • Bowel/Urine routine • Skin health care
• HgB A1C/Lipids blood pressure, weight control • X-ray deformity • Infection, foreign body • Assess for vascular supply (see arterial)	• Treat infection • Pressure down-loading/ contact cast or equivalent • Surgery for deformity • Vascular reconstruction	• Patient education • Deep toed shoes + orthotic • Daily foot inspection • Glycemic control, lipid, blood pressure and weight control

Appendix 3:
Chronic topical wound management

Approach	Peri-Wound Skin Management	Oedema/Exudate Control
Clinical Features	• Dermatitis • Maceration • Vesicles/erosions • Erythema, swelling & warmth	• Exudate quantity low, moderate, high • Exudate type serous, sanguineous, pustular or a combination
Cautions & Warnings	• Compromised barrier • Favours bacterial proliferation and inflammation	• Uncontrolled oedema will delay healing
Treatment and Preventative Strategies	**Skin Sealants** (e.g. film forming acrylates) **Skin Barriers** (e.g. zinc oxide paste) **Creams & Ointments** (e.g. petrolatum, topical steroids) **Topical Adhesive dressings** (e.g. hydrocolloids, films)	**Identify cause** • Treat venous disease with compression therapy and elevation of legs • Infection control: local or systemic antimicrobrial treatment • Achieve moisture balance and prevent leakage or maceration • For adequately treated and non-responsive patients, Adjunctive therapies (e.g. Negative Pressure Therapy)

Debridement	Critical Colonisation & Infection	Persistent Inflammation
• Debridement: Black = necrotic, Yellow = loose slough, Pink/red = granulation	• Friable bright red granulation • Exuberant granulation • New areas of breakdown-yellow slough on wound surface • Not healing • Odour	• May mimic infection • Not usually warm • Can prevent wounds from progressing to granulation stage
• Use caution when debriding wounds that are non healable	• Surface changes may prevent healing or herald deeper infection	• Systemic treatment may be necessary (e.g. Vasculitis, pyoderma gangrenosum)
Choose appropriate debridement method • Autolytic • Mecanical • Chemical (enzymes) • Sharp/Surgical • Biological (Maggots)	• Wound cleansing • Debridement and exudate control • Topical antimicrobials (including topical silver dressings) • Topical antibiotics (when indicated) • Systemic antibacterials (if non-responsive or evidence of deeper infection)	• Minimize friction/shear • Relieve pressure • Bowel/Urine routine • Skin health care

Appendix 4:
Alternative choices for systemic medication

Class of Medication	Examples
Nociceptive Medication:	
Antipyretics	Acetaminophen
NSAIDS (non-steroidal anti-inflammatory drugs)	Ibuprofen Ketoprofen COX-2 inhibitors
Opioids S = short acting L= long acting	Codeine (S) Codeine contin (L) Morphine (S) Morphine contin (L) Fentanyl (L)
Neuropathic medications:	
Tricyclic anti-depressants	Nortriptyline or Desipramine or Amitryptyline
Anti-epileptics	Gabapentin
Antidepressants	Carbamazepine

Warning: Always take advice from prescriber. Individual patient assessment must be performed. For dosage look at institutional and national protocols.
Disclaimer: Coloplast cannot be held responsible for any of the above medications.

Suggested literature on Wound Pain

Websites:

www.

biatain-ibu.coloplast.com
worldwidewounds.com
advancingthepractice.org
wuwhs.org (World Union of Wound Healing Societies)
iasp-pain.org (Association for the study of pain)
coloplast.com

“The impact of living with a wound and its treatment can be seen in different ways by different people, but only the patient genuinely understands the significance of that experience”
(Hayes 1997)

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