CARING FOR PATIENTS WITH PAINFUL, MALIGNANT AND “NEVER HEALING” WOUNDS

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At the conclusion of this presentation, participants will be able to:

1. Describe the physical symptoms of malignant wounds
2. Describe the psychosocial aspects of malignant wounds
3. Address pain, odour and bleeding from malignant wounds in an evidence-informed way
I will discuss off-label use of:

1. Topical opioids for analgesia
2. Topical sucralfate for bleeding
Warning

This presentation contains graphic and disturbing images

Viewer discretion is advised
Malignant Wounds

• Distressing problem for 5-10% of patients with advanced cancer
• May develop during the last few months of life or be present for a number of years
• Appear as an ulcer, a cavity, a nodule or a fungating mass
• Rarely heal and often require palliative management
Goals of Care

- Maintain or improve QOL through symptom control:
  - Hemorrhage
  - Odour
  - Pain
  - Exudate
  - Superficial Infection
Disease: HOPES

Physical Functioning:
- Bulky Dressings
- Restricted Movement

Psychological Functioning:
- Guilt, Shame, Revulsion
- Altered Body Image, Fear, Anxiety, Depression, Denial,

General Health Perception:
- Appearance, Self-Esteem, Helplessness

Social/Role Functioning:
- Impact on Family, Financial, Sexuality, Social Isolation
A wound is:

A very visible reminder of the underlying disease

A breach in the integrity of the wholeness of “self”
H (Hemorrhage)

**Natural hemostats**
Calcium alginites, collagen, oxidized cellulose

**Coagulants**
Absorbable gelatin powder, topical thrombin

**Sclerosing agents**
Silver nitrate, trichloroacetic acid

**Vasoconstrictors**
Epinephrine

**Fibrinolytic inhibitors**
Tranexamic acid

**Astringents**
Alum solution, sucralfate
Topical Tranexamic Acid

For slowly bleeding cutaneous metastases, or fungating tumours

**Ingredients:**
- 1000 mg (2 x 500 mg tabs) tranexamic acid
- 1 Saline soaked gauze

**Directions:**
1. Crush tablets
2. Mop-up with saline soaked gauze
3. Apply to wound BID

**Alternatively:**
Can crush tablets and mix with aqueous jelly, then mop up with gauze, or use sterile gauze soaked in 10 mL of 100 mg/mL injectable formulation*

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*Yorkshire Palliative Medicine Clinical Guidelines Group Guidelines on the management of bleeding for palliative care patients with cancer - summary January 2009*
Sucralfate Paste

For slowly bleeding cutaneous metastases, or fungating tumours

Ingredients:
- 1 g Sucralfate tablet
- 5 mL Water-soluble gel, such as K-Y® or Muko®

Directions:
1. Crush tablet and add gel
2. Mop up with gauze
3. Apply to wound once or twice daily PRN

Néron A. Care Beyond Cure: Management of Pain and Other Symptoms: Published in collaboration with l’Association des pharmaciens des établissements de santé du Québec (APÉS) and the Canadian Society of Hospital Pharmacists (CSHP). The Canadian journal of hospital pharmacy. 2009 Mar;62(2):178. (Chapter 24: Treatment of Bleeding)

O (Odour)

Probably the most distressing symptom for patients, family and caregivers
Wound malodour may be constantly detectable and can trigger gagging and vomiting reflexes
Leads to embarrassment, disgust, depression and social isolation
May have a detrimental effect on sexual expression causing relationship problems
O (Odour)

Caused by bacterial infection in devitalized tissue within the wound

Anaerobic and certain Gram-negative (eg, Pseudomonas) organisms

Metabolic byproducts:

Volatile fatty acids

Volatile sulfur compounds
• Metronidazole is effective as an anti-inflammatory and anti-infective agent against anaerobes
• Topical gels and creams (0.75% to 10%)
• Gauze can be soaked with IV metronidazole solution to use as a compress

Tablets can be ground into powder and sprinkled onto the wound surface - respiratory irritant!!

500 mg in 100 mL = 0.5%
P (Pain)

- Free nerve endings are present in the superficial layer of skin.
- When the skin is broken, the nerve endings are injured or inflamed, and they start to express opioid receptors within minutes to hours.
Opioid Receptors in the Periphery

Opioid receptors are synthesized in the DRG and transported via the axons to the periphery.

Topical application of opioids only effective in the presence of inflammation.
Topical Opioids

- Theoretical support for topical opioids
- Research is limited
  - Case reports
  - Small Series
  - Journal of Anecdotal Medicine

When do Patients Experience the Most Pain?

- 72% Dressing Removal
- 20% Wound Cleansing
- 5% Dressing application
- 2% While dressing on
- 3% No answer

Courtesy of FH Malignant and Palliative Wounds Teaching Module 2007
Donna Tyson Skin and Wound Care Clinician, Surrey
E (Exudate)

• Can be difficult to manage
• May increase if infection is present
• Large volumes of uncontrolled exudate may cause leakage from the dressing and staining of the patient's clothes
• Increases psychosocial problems for patients and caregivers
Management of Exudate

• Treat infection
• “Pouch” with stoma bag
• Absorbent dressings
• Think diapers!
• Get advice from Wound Care Nurse or Enterostomal Therapist
Stoma Powders

Animal Derived

Vegan
S (Superficial Infection)

- Sugar paste and honey have recently come back into use
  - Due to the emergence of AROs
- Both have antibacterial and debriding properties
- The high sugar content of these products → hyperosmotic wound environment that inhibits bacterial growth and assists in wound debridement
S (Superficial Infection)

Medicinal Ingredients (per gram): 10,000 units Polymyxin B (as Sulfate), 0.25 mg gramicidin
COMPOUND INTEREST

Get to Know a Compounding Pharmacist
Warning

This presentation contains graphic and disturbing images

Viewer discretion is advised
Case Study 1

Mr. P.T. (FHA Hospice inpatient)
56 years old
L parotid tumour
Refused surgery
Refused radiation/chemo
Refused analgesics except acetaminophen
In hospice residence with door shut, few visitors

Photo courtesy of Ruth Topolnicky, Clinical Nurse Specialist, Surrey
Case Study 1

Concerns:

- Exudate
- Bleeding
- Odour
- Pain
Methadone in Metronidazole with Optional Tranexamic Acid

For painful, foul smelling +/- bleeding skin wounds

Ingredients:
- 60 mg Methadone powder (0.1%)
- 60 g 10% Metronidazole Cream ("Vaginal Flagyl®")
- 4 g (8 x 500 mg tabs) Tranexamic acid (optional)

Directions:
1. Mix all ingredients together
2. Apply to wound with each dressing change

Developed by literature review and field experience

Dr. Nicola Macpherson
Reviewed Feb 2018
This Bulletin Just in...

Formulary Implementation  November 28, 2018

Important news about the BCHA Formulary implementation in Fraser Health

Formulary Additions

<table>
<thead>
<tr>
<th>Drug to be added</th>
<th>Indication/Decision</th>
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<tbody>
<tr>
<td>methadone oral solid, oral solution, and powder for compounding (METADOL)</td>
<td>All restrictions removed. Prescribers no longer need to have a methadone exemption under section 56(1) of the Controlled Drugs and Substances Act.</td>
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Effective date: November 28, 2018
Case Study 1

Outcome:

Odour markedly reduced
Family resumed visiting
Door could be opened
Methadone and Metronidazole in Polysporin® Cream & Optional Tranexamic Acid

For painful, foul smelling +/- bleeding skin wounds

**Ingredients:**
- 50 mg Methadone powder (0.1%)
- 1 g Metronidazole (works out to 2%, can increase if desired)
- 50 mL Polysporin® **Cream** (less allergenic than ointment)
- +/- 4 g (8 x 500 mg tabs) Tranexamic acid (optional)

**Directions:**
1. Mix all ingredients together
2. Apply to wound with each dressing change

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Case Study 2

Mrs. B. C
Cavitating breast wound
Some slough but not a lot of exudate
Wound care nurse recommended Intrasite Gel for gentle debridement
Methadone in Intrasite Gel™

To facilitate gentle autolytic debridement of fungating wounds

**Ingredients:**
- 100 mg Methadone powder (0.1%)
- 100 g Intrasite Gel™

**Directions:**
1. Use 10-25 g of gel daily in cavitating wound to debride devitalized tissue

Developed by literature review and field experience
Case Study 3

Mr. P.L.
Squamous cell cancer arising in front of ear
Planned 3 week course of RT for pain control
Distant mets discovered
Wanted to go home to rural area south of Calgary to be with family
Case Study 3

All he wanted was better pain control

He did not want a big bulky dressing

Called a compounding pharmacist across the street from Foothills Hospital for advice

Learned about pluronic gels, well known to vets!
Methadone in Pluronic Gel

Adheres to fungating wounds or fills cavitating wounds

**Ingredients:**

0.1% Methadone

In 30% Poloxamer 407 (also known as Thermoreversible Gel or Pluronic Gel)

**Directions:**

1. Spray thin layer of liquid onto fungating wound, or into wound cavity, daily after wound care, cleansing or gentle debridement

2. This product is liquid in the refrigerator, but solidifies as it comes up to body temperature, so it is useful in wounds in hard to dress areas

If left at room temperature it will form a gel. Refrigerating the gel will liquefy it again

In theory, the 30% gel can stay in place for days, especially when used to administer antibiotics into wounds. In practice, topical methadone has a duration of action as an analgesic of about a day, hence the more frequent re-applications used here.

Created in discussion with two community compounding pharmacists in Calgary

Dr. Nicola Macpherson

Reviewed Feb 2018
Case Study 4

Mrs. P.S.
Nursing home patient with advanced dementia and painful weeping wound on ankle

Systemic analgesics causing confusion

Daily dressing changes painful causing combative behaviour
Case Study 5

Mr. D.U.

83-year-old man with advanced dementia, moderate CRF and CHF who lives in a residential care facility

Developed a large sacral pressure ulcer with involvement of subcutaneous tissue down to the fascia

Looks uncomfortable and calls out when being moved

Resists care and daily dressing changes
Methadone in Stoma Powder

Best for exudative wounds with exposed tissue. Useful in hard to dress locations

Ingredients:
280 mg Methadone powder (works out to approx. 1%)
1 oz (28.3 g) Bottle of stoma powder

Directions:
1. Add the methadone into the Stoma powder applicator, or put both into a clean salt shaker.
2. Mix the two well, before each application.
3. Sprinkle onto wound after cleansing with sterile water.

Note: Stomahesive® and Adapt® brands of stoma powders contain gelatin, usually derived from pork; Brava Powder® does not.

Another alternative, widely available at compounding pharmacies, is “Polyox Bandage”, which, like stoma powders, can be “puffed” onto a wound and will adhere even if exudate is present.

Case Study 6

Ms. V.C.
Extramammary Paget's disease of vulva
Palpable regional lymph nodes
Not a surgical candidate due to co-morbidities
Went on to complete a course of palliative RT
Having lots of pain leaving her bed-bound
Topical Spray for Malodourous +/- Bleeding +/- Painful Wounds

Depending on the size and location of the wound, this can be sprayed with a standard household spray bottle, or a “MAD” device

**Ingredients:**

+/- 250 mg Methadone (0.1 %)
+/- 1000 mg (2 x 500 mg tabs) Tranexamic acid
+/- 500 mg Metronidazole (0.2%)
qs 250 mL NS

**Directions:**

1. Spray onto wound PRN for pain and/or odour

Metered dose sprayer not required. A small travel-sized spray bottle is usually adequate

Developed by literature review and field experience

Dr. Nicola Macpherson

Reviewed Feb 2018
MAD® for Liquids
Mucosal Atomization Device

- 0.1% (1 mg/ml) morphine or methadone
- Absorption unknown:
  - morphine
    - ? up to 75%
  - Methadone
    - ? less than 5%
For Bigger Wounds

- Travel-sized spray bottles:
- Pressurized “misters”
- Larger household spray bottles:
Get to Know a Compounding Pharmacist!

Whatever community you are in, ask around for a compounding pharmacist

Pick up the phone and explain what you are trying to do for your patient

Ask for their advice, they have lots to offer, esp. about suitable vehicles. If they belong to the PCCA (Professional Compounding Centers of America) they have access to lots of detailed recipes
Get to Know a Compounding Pharmacist!

If your patient is registered on Palliative Benefits, ask the pharmacist what paperwork the two of you can do in order to get their compounding fee covered (if possible)

You may have to put in some sort of Special Authority Request
In collaboration with the Canadian Society of Hospital Pharmacists (CSHP) presents...

**Care Beyond Cure**


**Complete Guide & Reference Tables**

Regular Price: $79.95
CSHP Member Price*: $69.95

The fourth edition of Care Beyond Cure presents up-to-date information about managing pain and other symptoms for the benefit of patients receiving palliative care. This latest version has a new two volume format: the complete guide, for in-depth understanding, and a pocket summary of the reference tables with tabs for quick searches. New ideas have led to the addition of 11 new chapters, covering such topics as bleeding, thromboprophylaxis, discontinuation of drug therapy, and home care.
By now, participants should be able to:

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QUESTIONS?