BC Centre for Palliative Care

B.C. INTER-PROFESSIONAL PALLIATIVE SYMPTOM MANAGEMENT GUIDELINES

fraserhealth

Interior Health
Every person matters

First Nations Health Authority
Health through wellness

island health

Providence
HEALTH CARE

Vancouver
CoastalHealth

northern health

BC Centre for Palliative Care

PRURITUS

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DEFINITION

Pruritus or itch is defined as an intense cutaneous discomfort occurring with pathological change in the skin and mucous membranes which elicits vigorous scratching. It is a complex symptom with poorly characterized pathophysiology and is variable in its perceived quality and intensity.[1] It may be idiopathic or prodrome of disease.[2]

PREVALENCE

Pruritus is rare but troublesome, ranging from 1% at onset of administration of opioids to 25-85% for persons with advanced renal failure. Prevalence increases with age.[2,3]

IMPACT

Can create significant suffering and morbidity leading to sleep deprivation, depression, anxiety, impaired quality of life, and even suicidal ideation.[1]

STANDARD OF CARE

Step 1 | Goals of care conversation

Determine goals of care in conversation with the patient, family and inter-disciplinary team. Refer to additional resources (Additional resources for management of pruritus) for tools to guide conversations and required documentation. Goals of care may change over time and need to be reconsidered at times of transition, e.g., disease progression or transfer to another care setting.

Step 2 | Assessment

Pruritus Assessment: Using Mnemonic O, P, Q, R, S, T, U and V[31]

Mnemonic Letter	**Assessment Questions** *Whenever possible, ask the patient directly. Involve family as appropriate and desired by the patient.*
Onset	When did it begin? How long does it last? How often does it occur?
Provoking /Palliating	What brings it on? What makes it better? What makes it worse?
Quality	What does it feel like? Can you describe it?
Region/Radiation	Where do you feel itchy? Is it in one area or your entire body?
Severity	Pruritus cannot be measured directly and is difficult to quantify.[4,5] Focus questions on impact on quality of life. May try questions using a rating scale: How severe is this symptom? What would you rate it on a scale of 0-10 (0 being none and 10 being the worst possible)? Right now? At worst? On average? How bothered are you by this symptom? Are there any other symptom(s) that accompany this symptom? (Existing itch measurement tools are too detailed and resource intensive for use in palliative care setting.[5])
Treatment	What medications and treatments are you currently using? Are you using any non-prescription treatments, herbal remedies, or traditional healing practices? How effective are these? Do you have any side effects from the medications and treatments? What have you tried in the past? Do you have concerns about side effects or cost of treatments?
Understanding	What do you believe is causing this symptom? How is it affecting you and/or your family? What is most concerning to you?
Values	What overall goals do we need to keep in mind as we manage this symptom? What is your acceptable level for this symptom (0-10)? Are there any beliefs, views or feelings about this symptom that are important to you and your family?

Symptom Assessment: Physical assessment as appropriate for symptom

Diagnostics: consider goals of care before ordering diagnostic testing.

Step 3 | Determine possible causes and reverse as possible if in keeping with goals of care

- Pruritus should not be considered simply a skin disorder, but rather a systemic problem for which there are multiple causes. It is difficult to isolate these entirely and some degree of overlap is likely.[6]
- **Systemic etiology** may be present in 4-40% of all cases.6 Anxiety or fear may be both cause and consequence of pruritus.6
- Although it is normal to experience occasional mild or moderate pruritus, the **severe pruritus** seen in patients with advanced disease is usually associated with uremia (chronic renal failure), cholestasis, opioids, and hematologic disorders; it is a frequent complication of cholestasis.7 Solid tumours can cause pruritus via biliary obstruction (e.g., in pancreatic cancer). Dry skin also accompanies many of these conditions.8
- **Opioid-induced itch** is due to release of histamines and is more common with spinal opioids than with systemic opioids.[8] May require switching of opioids.[31]

PRINCIPLES OF MANAGEMENT

When considering a management approach, always balance burden of a possible intervention against the likely benefit (e.g., does the intervention require transfer to another care setting?)

- There is no universally effective treatment for palliative care patients due to different pathomechanisms.[3,9]
- Combinations of systemic and topical agents often provide the best relief.[1]
- Treatment evidence is stronger for systemic drug therapy than for topical therapy; however, topicals have fewer adverse effects.
- Treatment responses are very individual and cannot easily be predicted.[10]
- Medications inducing photosensitivity may exacerbate itching; these include: NSAIDS, diuretics, antineoplastics, ciprofloxin.[11]
- Address other associated cluster symptoms associated with pruritus including sleep, depression and pain.
- A multi-disciplinary team approach is often essential.[12,13] Difficult cases require consultation with other medical specialists, e.g., palliative physician and dermatologist.

LEGEND FOR USE OF BULLETS

Bullets are used to identify the type or strength of recommendation that is being made, based on a review of available evidence, using a modified GRADE process.

✓	**Use with confidence:** recommendations are supported by moderate to high levels of empirical evidence.
⬟	**Use if benefits outweigh potential harm:** recommendations are supported by clinical practice experience, anecdotal, observational or case study evidence providing low level empirical evidence.
⚠	**Use with caution:** Evidence for recommendations is conflicting or insufficient, requiring further study
☒	**Not recommended:** high level empirical evidence of no benefit or potential harm

Non-pharmacological interventions

Interventions available in the home and residential care facilities

- **Tepid baths** with mild, unscented soap can be soothing and temporarily relieve the itch.[1,8]
- Add **baking soda** to late evening bath to form protective layer and maintain hydration.[4,7]
- **Dry skin** by **gently** patting with soft towel or use hair dryer on low setting.[7]
- **Use a "soak and seal" method**: pat skin dry, lubricate the skin with a fragrance-free, cream-base emollient containing camphor or menthol (**see pharmacological interventions below**).
- **Keep** finger and toe nails **short and filed**.

Non-pharmacological interventions continued on next page

Non-pharmacological interventions *continued*

- Provide **cotton gloves** for day or night use for those with strong urge to scratch.
- **Apply tap water wet dressings** (e.g., cotton long underwear soaked in water) to the affected areas several times daily for 1–2 hours for excoriations and crusting due to scratching; provides temporary relief and hastens healing of injured skin.[1]
- **Loose, cotton clothing** is less irritating, minimizes heat retention and sweating.[1]
- **Avoid fragrant** topical agents, perfumes, perfumed soaps.[8]
- **Cool packs** and loose, light cotton bedding.
- Provide **cool humidified environment**.[2]

Interventions requiring additional equipment or admission to acute care

- **Ultraviolet B light therapy** performed 3 X a week may be useful in pruritus secondary to uremia, cholestasis and malignant skin infiltrations; may not be suitable for terminally ill persons.[8] **Stent placement** helps pruritus from cholestasis secondary to pancreatic cancer (to decompress biliary obstruction)[7,8,14] and might negate the need for any pharmacologic treatment, eliminating potential adverse side effects of certain drugs.[8]
- **Endoscopic or percutaneous biliary tree decompression** should be considered in biliary obstruction.[15]

Pharmacological interventions (For more detailed pharmacological information, see Medications for management of pruritus)

High quality evidence for interventions in palliative care patients is lacking; the diverse nature and presentation of pruritus hamper studies and drug selection.[7,9]

- **Antihistamines** are generally not helpful, as the role of histamine remains unclear.[7,8,16]
  - Antihistamines value maybe limited to relief via sedation and use at bedtime.[4,9]
  - Cetirizine is a very minimally sedating daytime antihistamine.

Pharmacological interventions continued on next page

Pharmacological interventions *continued*

- **Cholestyramine** is the only drug with a Canadian licensed indication for treatment of pruritus, for use associated with partial biliary obstruction.[17]
- **Paroxetine's** effectiveness is cautiously assumed for general palliative pruritus treatment, yet its harm assessment is limited.[3,9]
- Sertraline at low daily doses can be effective; does not require dose adjustment in renal impairment. Adverse effects may be minimal.

Topicals

- Mild to moderate potency corticosteroids (for inflammation), topical anesthetics (lidocaine, prilocaine, pramoxine), doxepin.[2]
- Cooling products such as menthol (0.25-2%), camphor (1-3%) are used within emollient compounds.[2]
- Ketamine (0.5-5%) with amitriptyline (1-2%) in compounded creams.[18,19]
- Avoid topical antihistamine creams due to risk of allergic contact dermatitis.[7,20]

Other

- Systemic corticosteroids have also been used for cholestatic pruritus.[21]
- Case reports therapies have included: lidocaine infusion,[22] ranitidine,[23] and indomethacin for pruritus in HIV patients.[3]

Patient and family education

- Prevent boredom or anxiety in creative, personalized ways.[7]
- Avoid vasodilators such as coffee, alcohol, spices and hot water.
- Teach recommended non-pharmacologic strategies.

ADDITIONAL RESOURCES FOR MANAGEMENT OF PRURITUS

Resources specific to Pruritus

- BC Cancer Agency symptom management guidelines for radiation dermatitis
  - ➞ http://www.bccancer.bc.ca/nursing-site/Documents/16.%20Radiation%20Dermatitis.pdf
- BC Cancer Agency symptom management guideline for acneiform rash
  - ➞ http://www.bccancer.bc.ca/nursing-site/Documents/1.%20Acneiform%20Rash.pdf
- BC Renal Agency pruritic treatment algorithm in hemodialysis patients
  - ➞ http://www.bcrenalagency.ca/resource-gallery/Documents/SymptomManagementProtocolPruritus1.pdf
- ESAS Renal
  - ➞ http://palliative.org/NewPC/_pdfs/tools/ESASr%20Renal.pdf

General Resources

- **Provincial Palliative Care Line** – for **physician** advice or support, call **1 877 711-5757** In ongoing partnership with the Doctors of BC, the toll-free Provincial Palliative Care Consultation Phone Line is staffed by Vancouver Home Hospice Palliative Care physicians 24 hours per day, 7 days per week to assist physicians in B.C. with advice about symptom management, psychosocial issues, or difficult end-of-life decision making.
- BC Centre for Palliative Care: Serious Illness Conversation Guide
  - ➞ http://www.bc-cpc.ca/cpc/
- BC Guidelines: Palliative Care for the Patient with Incurable Cancer or Advanced Disease
  - ➞ http://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/palliative-care

Additional resources for management of pruritus continued on next page

ADDITIONAL RESOURCES FOR MANAGEMENT OF PRURITUS *CONTINUED*

- BC Palliative Care Benefits: Information for prescribers
  - ➞ http://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/pharmacare/prescribers/plan-p-bc-palliative-care-benefits-program
- National Centre for Complementary and Alternative Medicine (NCCAM) for additional information on the use of non-pharmacological interventions
  - ➞ https://nccih.nih.gov/
- Canadian Association of Psychosocial Oncology: Pan-Canadian Practice Guideline: Screening, Assessment and Management of Psychosocial Distress, Depression and Anxiety in Adults with Cancer
  - ➞ http://www.capo.ca/wp-content/uploads/2015/11/FINAL_Distress_Guideline1.pdf
- Fraser Health psychosocial care guideline
  - ➞ https://www.fraserhealth.ca/media/psychosocial%20care.pdf

Resources specific to health organization/region

- Fraser Health
  - ➞ http://www.fraserhealth.ca/health-professionals/professional-resources/hospice-palliative-care/
- First Nations Health Authority
  - ➞ http://www.fnha.ca/
- Interior Health
  - ➞ https://www.interiorhealth.ca/YourCare/PalliativeCare/Pages/default.aspx
- Island Health
  - ➞ http://www.viha.ca/pal_eol/
- Northern Health
  - ➞ https://www.northernhealth.ca/Professionals/PalliativeCareEndofLifeCare.aspx

Additional resources for management of pruritus continued on next page

ADDITIONAL RESOURCES FOR MANAGEMENT OF PRURITUS *CONTINUED*

- Providence Health
  - ➞ http://hpc.providencehealthcare.org/
- Vancouver Coastal Health
  - ➞ http://www.vch.ca/your-care/home-community-care/care-options/hospice-palliative-care

Resources specific to patient population

- ALS Society of Canada: A Guide to ALS patient care for primary care physicians
  - ➞ https://als.ca/wp-content/uploads/2017/02/A-Guide-to-ALS-Patient-Care-For-Primary-Care-Physicians-English.pdf
- ALS Society of British Columbia 1-800-708-3228
  - ➞ www.alsbc.ca
- BC Cancer Agency: Symptom management guidelines
  - ➞ http://www.bccancer.bc.ca/health-professionals/clinical-resources/nursing/symptom-management
- BC Renal Agency: Conservative care pathway and symptom management
  - ➞ http://www.bcrenalagency.ca/health-professionals/clinical-resources/palliative-care
- BC's Heart Failure Network: Clinical practice guidelines for heart failure symptom management
  - ➞ http://www.bcheartfailure.ca/for-bc-healthcare-providers/end-of-life-tools/
- Canuck Place Children's Hospice
  - ➞ https://www.canuckplace.org/resources/for-health-professionals/
    - 24 hr line – 1.877.882.2288
    - Page a Pediatric Palliative care physician – 1-604-875-2161 (request palliative physician on call)
- Together for short lives: Basic symptom control in pediatric palliative care
  - ➞ http://www.togetherforshortlives.org.uk/professionals/resources/2434_basic_symptom_control_in_paediatric_palliative_care_free_download

UNDERLYING CAUSES OF PRURITUS IN PALLIATIVE CARE

Information is contained in the body of the document.

Medications for management of pruritus continued on next page

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MEDICATIONS FOR MANAGEMENT OF PRURITUS

Drug, Action	Indication(s)	Dose, therapeutic range	Adverse Effects, Precautions, Dosing Concerns
Cholestyramine (resin binds intestinal biliary acids, interrupts enterohepatic cycle of biliary acids)[2, 7, 24]	Cholestasis, Solid tumors and paraneoplastic disorders, Uremia	Initial: 4 g PO taken 30 minutes before breakfast and 30 minutes after breakfast. As needed, add 2 doses at lunchtime (before and after the meal) or at dinnertime (before and after the meal) Maximum: 16 to 32 g/day.	Nausea, constipation, abdominal discomfort, flatulence, unpleasant taste. Often poorly tolerated. Breakfast dosing time effective as pruritogens are stored in the gallbladder overnight. MANY drug interactions, commonly requires dose spacing. Take one hour before or 4-6 hours after other medication to avoid absorption impairment.
Doxepin](H1, H2, muscarinic antagonist)[2]	Cholestasis, Psychogenic	Initial: 10 to 25 mg PO HS Increase by 25 mg/day. Maximum:75 to 300 mg per day in divided doses.	Drowsiness, xerostomia Powerful H1 effect (more than hydroxyzine or diphenhydramine). QTc prolongation if dose over 100 mg per day.
Gabapentin (blocks central nociceptive transmissions to brain)[4,15,16]	Lymphoma, Opioid-induced, Uremia, if failure of other treatments	Initial: 100 mg PO TID. Hemodialysis patients: 100 to 300 mg PO once after HD Pre-op: 1200 mg single dose Maximum: up to 1200 mg/day.	Drowsiness, dizziness, fatigue, ataxia, peripheral edema, visual disturbances, unsteadiness. Adjust dose for reduced renal function. In extended therapy, (optimally) reduce dose over a minimum of one week. Very few drug interactions

Medications for management of pruritus continued on next page

MEDICATIONS FOR MANAGEMENT OF PRURITUS
CONTINUED

Drug, Action	Indication(s)	Dose, therapeutic range	Adverse Effects, Precautions, Dosing Concerns
Methylnaltrexone (mu opioid receptor antagonist)[25, 26]	Cholestasis	Initial: 12 mg SC daily Repeat dosing every 1 to 2 days PRN.	Abdominal pain (SC 21-29%), flatulence (13%), nausea (9-12%). Contraindicated in known or suspected GI obstruction or if an increased risk of recurrent obstruction. Costly. Acts peripherally; did not reverse opioid analgesia in two patients.
Mirtazapine (H1,5-HT2, 5HT3 receptor antagonist)[2,26]	Cholestasis, Lymphoma, Solid tumors and paraneoplastic disorders, uremia if failure of other treatments	Initial: 7.5 to 15 mg PO HS. If partial relief after one week, increase by 15 mg. Maximum: 30 mg/day.	Drowsiness, but may be beneficial for itch suffering at HS. Weight gain. No anxiety or nausea at start of use (unlike SSRI's). Few drug interactions. Use caution if history of seizures. Discontinuation symptoms have been reported upon abrupt withdrawal; reduce dose gradually if possible. Therapeutic effect may disappear after 4 to 6 weeks. Clearance is reduced in moderate and severe renal function. Administer with caution in hepatic impairment.

Medications for management of pruritus continued on next page

MEDICATIONS FOR MANAGEMENT OF PRURITUS
CONTINUED

Drug, Action	Indication(s)	Dose, therapeutic range	Adverse Effects, Precautions, Dosing Concerns
Naloxone (mu opioid receptor antagonist)[2, 27]	Cholestasis, Opioid-induced, Psychogenic	Initial: 0.2 mcg per kg per minute IV infusion. Double the infusion rate every 3 to 4 hours PRN Maximum: 0.8 mcg/kg/min.	Withdrawal syndrome: if on opioids (reversing analgesia), or if high endogenous opioids (e.g., in cholestasis, liver damage or uremia). May change to PO naltrexone after 24 to 48 hours of use.
Naltrexone (mu opioid receptor antagonist)[2,3,24,26]	Cholestasis, Psychogenic, Uremia	Initial: 6.25 to 12.5 mg PO daily. Increase by increments of 12.5 to 25 mg BID or TID. Maximum: 300 mg/day.	Vertigo (19-50%) is a major fall risk concern. Dizziness, nausea (29%), abdominal pain, diarrhea, appetite loss, vomiting, arthralgia, anxiety. Withdrawal syndrome; if on opioids (reversing analgesia), or if high endogenous opioids (e.g., in cholestasis, liver damage or uremia) Hepatotoxicity at high doses.
Ondansetron (5-HTs antagonist)[1-3, 6, 24]	Cholestasis, Opioid-induced, Psychogenic, Uremia	Initial: 4 mg PO, SC, IV once or twice daily. Maximum: 8 mg TID.	Headache (17%), constipation (11%), diarrhea (16%), xerostomia (5%), increased liver enzymes (17%), fever. Benefit may be ineffective or dose dependent. Single 4 mg IV may be effective for 4 hours; 8 mg IV effective for 16 hours. Costly.

Medications for management of pruritus continued on next page

MEDICATIONS FOR MANAGEMENT OF PRURITUS
CONTINUED

Drug, Action	Indication(s)	Dose, therapeutic range	Adverse Effects, Precautions, Dosing Concerns
Paroxetine (serotonin reduced via 5-HT3 receptor reduction)[2,8,26,28]	Cholestasis, Solid tumors and paraneoplastic disorders, Opioid induced, if failure of other treatments	Initial: 5 to 10 mg PO daily. Increase by 10 mg per day, every 4 to 5 days. Maximum: 20 mg/day.	Nausea and vomiting, especially first 3 days. Drowsiness. Lower or less frequent dosing may be needed in severe renal impairment (CrCl less than 30 mL/min). Lower and less frequent dosing may be necessary in patients with severe hepatic impairment. Use caution in seizure disorder patients. Pruritus may return within 3 days if discontinued. Avoid abrupt discontinuation as may increase risk of serious discontinuation symptoms; gradual dose reduction and monitoring recommended. Antipruritic effect may disappear after 2-3 months for some patients

Medications for management of pruritus continued on next page

MEDICATIONS FOR MANAGEMENT OF PRURITUS
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Drug, Action	Indication(s)	Dose, therapeutic range	Adverse Effects, Precautions, Dosing Concerns
Rifampin (also called Rifampicin, e.g., in Europe) (inhibits biliary acid reuptake, interrupts enterohepatic cycle of biliary acids)[2,26]	Cholestasis	Initial: 75 mg PO daily. Double dose every week PRN. Maximum: 300 mg BID.	MANY drug interactions; assess risk prior to initiation. Monitor liver function, particularly in first 2 months of treatment. Do not drink alcohol while taking. Take 1 hour before or 2 hours after a meal with a full glass of water. To avoid long term adverse effects, (hepatitis, hemolytic anemia, renal failure, thrombocytopenia) stop if pruritus completely resolves.
Sertraline (serotonin reduced via 5-HT3 receptor reduction)[2,26,29,30]	Cholestasis	Initial: 25 mg PO daily. Adjust by 25 mg per day every 4 to 5 days. Maximum: 100 mg/day.	Adverse effects: insomnia, nausea. Duration of antipruritic effect sustained throughout full treatment use, unlike paroxetine. Use caution in seizure disorder patients. No adjustment needed in renal impairment.

† Off-label. PO = by mouth IV = Intravenous, SC = Subcutaneous, TID = three times daily, QID = four times daily ODT = oral dissolving tablet CSCI = continuous subcutaneous infusion.

Prices for prescription drugs may be obtained from BC PharmaCare. The British Columbia Palliative Care Benefits Plan http://www2.gov.bc.ca/assets/gov/health/health-drug-coverage/pharmacare/palliative-formulary.pdf provides province wide drug coverage for many of the recommended medications– check website to confirm coverage. **Consider price when choosing similarly beneficial medications, especially when the patient / family is covering the cost.**

PRURITUS MANAGEMENT ALGORITHM

No management algorithm included in this document.

PRURITUS EXTRA RESOURCES OR ASSESSMENT TOOLS

No extra resources or assessment tools included in this document.

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