ANTICONVULSANTS - NON-ORAL ROUTES

When NPO orders are issued for our palliative patients it can be difficult to continue with specific therapies as not all medications are available in alternate routes. Off label, or unofficially approved uses, may be required in order to provide continued care for our patients. By adapting available medications for the rectal, sublingual, subcutaneous, buccal and intranasal routes, we can attempt to continue to provide adequate pharmaceutical care during the final days of our patients' lives. In the palliative care setting IM and IV administration are usually avoided unless the patient has a PICC or IVAD line in place. Rectal administration in particular has been under investigation as the rectum provides rapid absorption of many medications with the advantage of avoiding first pass metabolism¹.

Carbamazepine
- Available as tablets, chew tablets, oral suspension, CR tablets.
- Two studies comparing oral with rectal use of carbamazepine suspension concluded that the two routes provided similar absorptions⁶.
- When used rectally, the suspension can be difficult to retain, as it increases the patients' urge to defecate despite the small volume of suspension used and it has to be held in place for at least 2 hours⁶.
- Other research involving crushed carbamazepine tablets filled into gelatin capsules and then inserted into the rectum did not produce the same urge to defecate and was able to produce therapeutic effects⁶,⁷.
- These off label formulations have been successful for the control of seizures and neuropathic pain but have not been widely studied for the use in status epilepticus.

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Our 10th Newsletter

The purpose of this newsletter:
- transdisciplinary communication tool for palliative care in Northern Health

Topics will include:
- information on drug therapy, symptom management, and psychosocial issues
- education opportunities
- contact information for consultation team across Northern Health

Who should read this newsletter?
- Any health professional caring for palliative patients in acute care, residential care, or the home setting.

Submissions, ideas, or questions?
If you have an article you would like to submit or have a request for a particular article please contact me at the email below. The newsletter will be published 3-4 times annually.

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Gabapentin
- Available as a capsule.
- Has not shown to be as effective as oral administration when given rectally.
- When a patient has an NPO order it is in the patients’ best interest to be changed to an anti-epileptic drug (AED) that is given parenteral or rectal.10

Lamotrigine
- Available as tablet.
- Crushed lamotrigine chewable tablets given as a rectal suspension has less bioavailability compared to the oral route but it is still used rectally when necessary.7, 13

Oxcarbazepine
- Available as oral suspension, tablets.
- Poor rectal bioavailability possibly due to that fact that it is poorly soluble in water.8
- Currently, the doses used have not yet shown adequate rectal absorption.7, 8, 9

Phenobarbital
- Available as tablets, oral syrup, and parenteral (IM/IV) product.
- Demonstrates slow rectal absorption when administered as a suppository making it an inappropriate route for the treatment of status epilepticus, however, the bioavailability in children is more reliable than the oral formulation as it skips first pass metabolism7.
- Rectal dosing of Phenobarbital has been used in the palliative setting for seizure control as well as palliative sedation.7
- SC use not addressed by manufacturer but is used in palliative care settings.14

Phenytoin
- Available as capsule, chewtab, oral suspension, and parenteral (IM/IV) product.
- IM/SC not recommended due to erratic absorption and pain/tissue damage.
- Has not shown effectiveness in controlling seizures via rectal route due to unreliable and unpredictable absorption.7, 11,12

Valproic Acid
- Available as capsules and oral syrup. Parenteral form available through Health Canada special access program (SAP).
- Bioavailability of the rectal route is at least as great as the oral route.
- Rectal doses of valproic acid can be successfully used for status epilepticus, seizure control and neuropathic pain.6, 7

Benzodiazepines:

Clonazepam
- Available as a tablet.
- In other countries, clonazepam liquid given rectally has been studied and has shown that it can be well absorbed via the rectal route and may show promise in the treatment of status epilepticus.1, 5

Diazepam
- Available as: tablets, rectal gel, parenteral (IM/IV) product.
- Rectal diazepam has been investigated in many studies and due to its slower absorption and lower peak concentration it has a smaller risk for respiratory depression when compared to IV administration.2
- Rectal gel is used frequently in the pediatric palliative care setting.
- Due to the cost of the rectal gel, the parenteral product is often given rectally.

Lorazepam
- Available as: tablet, SL tablet, parenteral (IM/IV) product.
- Sublingual lorazepam tablets have similar absorption when compared to the oral route.
- SC use is not addressed by manufacturer but is used in palliative care settings.14
Midazolam
- Available as: parenteral (IM/IV) product.
- Buccal use becoming more popular.
- Comparative studies have shown that buccal midazolam may prove more effective than rectal diazepam for the treatment of status epilepticus in pediatric palliative patients although both are good options.²
- Has been used intra-nasally in children with intractable epilepsy³ and has been shown to be a safe alternative to rectal diazepam in both adults and children.⁴
- SC use not addressed by manufacturer but common practice in palliative care.¹⁴,¹⁵

When NPO orders are received in patients requiring AED’s there is evidence to support various routes of administration for many medications. When choosing an alternate route of administration we must take into consideration our patients’ and caregivers’ needs, beliefs and opinions.

Author: Rachelle Miller, BSc Pharm, Pharm D(c) written while completing Pharm D rotation with Nicole Dahlen, Pharmacist lead NH HPC

References:
1. Tom W. Alternative or “off-label” routes of drug administration. Pharmacists Letter. 2006; 22(221012).

NEW 2nd edition NH HPC Symptom Guidelines

The 2nd edition Northern Health Hospice Palliative Care Symptom Guidelines were endorsed by NH Medical Advisory Committee in October 2008 and are currently being distributed by HPC Nurse consultants to be used as a clinical decision making and education tool. An electronic copy is available on our palliative iportal site:

- NH home iportal
- clinical resources
- palliative care
- documents
- symptom guidelines

or use this link:
http://iportal.northernhealth.ca/ClinicalResources/palliativecare/Pages/default.aspx
PAIN ASSESSMENT IN PALLIATIVE CARE

“If we can not assess pain, we will never be able to relieve pain”

Betty Ferrell RN PhD, FAAN

Basic pain assessment is a simple but unfortunately often missed task in health care today. Many studies conclude that the failure of health care providers to assess pain and then to accept and act on a patients’ report of pain are the most common causes of unrelieved pain and unnecessary suffering.\(^{(1)}\) There are many, often complex reasons as to why pain is not assessed or managed appropriately. The reasons can be divided into three categories – the health care system, the health care provider and the patient and family.

**The Health Care System:**
The health care system may have no standards, guidelines or policies related to pain assessment. In 1995 The American Pain Society recommended that to make pain more visible it should be designated the 5th Vital Sign. As the 5th vital sign a pain scale would be included on the vital sign sheet and monitored on a regular basis just as pulse, respirations, B/P and temperature are. Improving pain management requires that pain becomes a priority in health care setting.

**The Health Care Provider:**
Some health care providers may lack the knowledge and skill needed to complete a pain assessment. A care provider may be unfamiliar with the concept of “Total Pain” and all the factors contributing to pain, pain etiology or current Clinical Practice Guidelines for the treatment of pain. Continuing education is needed to provide this information for all care providers.

**The Patient &/Family:**
At times it is the family or patients who are the barriers in pain assessment and management. Fear of not being believed, of being labeled and misconceptions about pain, (that it is inevitable with dying) or about pain medications (addiction issues or ideas such as “if I take them now they won’t work later”), and other psychological, emotional, social and cultural factors that influence pain will affect what the patient reports or doesn’t report about their pain.

Pain assessments are the foundation upon which a treatment for pain is built. Because of the complex nature of pain and barriers that may prevent an assessment from being done, the process and pain assessment tool must be comprehensive, multidimensional, based on patient self reporting yet practical enough to be useful in the care setting where they will be completed. The NH Hospice Palliative Care Program has adopted the OPQRSTUV format to guide care providers in the systematic collection of relevant information when doing a pain assessment.

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More Education………..

January 31, 2009
Victoria Hospice Society
17th Annual Spiritual Care Conference
Victoria, BC
http://victoriahospice.org/courses_spiritual.html

February 16–20, 2009
Victoria Hospice Society
Semi-Annual Psychosocial Care of the Dying & Bereaved Course
Victoria, BC
http://victoriahospice.org/courses_psych.html

March 9–13, 2009
Victoria Hospice Society
Semi-Annual Palliative Care: Medical Intensive Course
Victoria, BC
http://victoriahospice.org/courses_palliative.html
Pain Assessment using the OPQRSTUV:

<table>
<thead>
<tr>
<th>O</th>
<th>Onset – When did it begin? How long does it last? How often does it occur? Ask the patient about the onset of pain. Is this a new pain, a long standing pain or an old pain that has changed? Ask about the frequency, (intermittent or persistent). Variations and the rhythm of the pain help identify the type of pain the patient is experiencing</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Provoking/Palliating – What relieves or exacerbates the pain? If the patient has had pain for a long period of time they may know which medications/treatments have been helpful in the past. The patient will also know what aggravates the pains – ie. Intermittent severe pain related to an activity. Pain subsides when activity stops = incidental pain that may require the use of a short acting opioid and/modification of activity.</td>
</tr>
<tr>
<td>Q</td>
<td>Quality – Ask the patient to describe the pain using their own words – remember not to put words in the patient’s mouth. Patient qualifiers or descriptions of pain help to increase our understanding of the type of pain the patient is experiencing as well as possible underlying causes of the pain and has direct implications on the type of treatment needed. ie. Pain that is described as burning, shooting, “pins and needle” is typically neuropathic.</td>
</tr>
<tr>
<td>R</td>
<td>Region/Radiation – Where is the pain located and does it move anywhere? This can easily be done by asking the patient to mark the location of the pain using a body map, or to point to the area on their body. If there is more than one site of pain, letters can be used to distinguish different sites. Arrows can also be used to indicate pain that radiates. Precisely locating the pain helps determine the type and nature of pain that the patient is experiencing. ie. poorly localized, deep pain may be visceral in nature.</td>
</tr>
<tr>
<td>S</td>
<td>Severity- ask the patient to rate their pain using a pain scale. There are numerous scales, including descriptive words, colors, numbers and faces. Ratings should be for 0 (no pain) to 10 (worse pain imaginable) Use the most appropriate scale for the individual. Have the patient rate the pain intensity for present pain, worst pain, best pain and acceptable level of pain (their goal). Initial pain ratings help to determine treatment by classifying pain as mild 1-3/10, moderate 4-7/10, or severe 8-10/10. Once a treatment has been started, ongoing pain ratings help both the patient and caregiver track and evaluate the effectiveness of treatments.</td>
</tr>
<tr>
<td>T</td>
<td>Symptoms - Ask if there are other symptoms that accompany the pain? - ie. Nausea, dyspnea</td>
</tr>
<tr>
<td>U</td>
<td>Treatment – Ask the patient which medications/treatments have been tried in the past – what happened/ what worked what didn’t? What medications/treatments are they currently using? Doses, routes? Are they working? Knowing what has been tried in the past expedites decision making about how to treat pain now.</td>
</tr>
<tr>
<td>V</td>
<td>Understanding – What is the patient’s understanding/perception of the pain. Remember all the factors of Total Pain– intellectual, emotional, interpersonal, financial, spiritual, beaurocratic, and physical. What is the patient’s knowledge level, belief system, view of himself? What does the patient feel is causing the pain? What does the pain mean to the patient? What are the individual/family’s usual coping strategies? How is pain affecting ADLs? Ask What can we do to help you with your pain?</td>
</tr>
<tr>
<td>W</td>
<td>Values – What is your goal for this symptom? What is your comfort goal or acceptable level for this symptom (On a scale of 0-10 with 0 being none and 10 being worst possible)? Are there any other views or feelings about this symptom that are important to you or your family?</td>
</tr>
</tbody>
</table>
Completing a pain history using the information found in the OPQRSTU assessment along with a physical examination and appropriate diagnostics are essential before planning interventions for your palliative patient.

Samples of pain assessment forms using the OPQRSTU guidelines are available:
- Appendix 2.8 of the NH Hospice Palliative Care Manual
- Iportal > clinical services > palliative care > documents > NH HPC Program Manual > Appendix 2.8

Resource for pain assessment and management:

For information planning a Pain Workshop in your area please contact a member of the HPC Consultation Team in your HSDA

Author: Sandi Armitage, NE HPC Nurse Consultant

FIRST NATIONS OUTREACH

Responses to a palliative care questionnaire circulated in First Nations communities of the Northwest HSDA earlier this year put symptom management education and information on available palliative care programs at the top of the needs list.

Of the 20 questionnaires circulated by Northern Health’s NW Hospice Palliative Care Program Advisory Committee, 18 were returned covering 22 communities from Haida Gwaii to Burns Lake and north to Atlin.

Questions covered such topics as the existence of community palliative care programs, targeted palliative care funding, the availability of training and trained care givers in the communities and awareness of regional and provincial palliative care programs.

Responses indicated only one First Nations group in the Northwest has a specific palliative care program. Most provide a referral service only and most have no targeted palliative care funding.

Most communities reported having access to RN level nursing care but suggested very few of the RNs had any specific training in palliative care.

Only half of the respondents were aware of the BC Palliative Care Benefits Program and only three had helped clients access the program. Thirteen respondents indicated an awareness of the Northern Health Hospice Palliative Care Program and seven had helped clients access it.

Participants were also asked to estimate the number of First Nations people who die at home and the number who die in hospital. Responses indicated 17 per cent die at home while 58 per cent would prefer to die at home; eighty-one per cent die in hospital while only 38 per cent would prefer to die in hospital.

One respondent, a Community Health Nurse, said she couldn’t remember a single patient dying at home in the past three years. “We just don’t have the skills or the people to support family care givers,” she said. “Our people are afraid to die at home.”
Pain assessment and management topped the education wish list followed by information on the services and resources available through provincial and regional palliative care programs and how to access them.

As an initial response to the needs identified by the Northwest First Nations communities, a Northern Health Hospice Palliative Care Program consultant discussed the program with nurses from several First Nations and Inuit Health Branch communities.

In the near future we will distribute program manuals to all First Nations communities in the health authority region. The manuals contain detailed information on all of the resources available through both the Northern Health and provincial programs, information on how to contact the Northern Health palliative consultants’ team and copies of standardized assessment tools used in symptom management.

In addition, each community will also receive a copy of the new, 200-page 2nd ed. NH Palliative Care Symptom Management Guidelines.

In the Northwest, First Nations hospital liaison workers have been invited to join the Hospital Palliative Care Advisory Committee and members of the advisory committee will work with various provincial and national agencies to promote enhanced palliative care in First Nations communities.

Author: Lynn Shervill, NW HPC Nurse consultant

Cathy graduated in Nursing in 1983 from the University of Edinburgh, UK. She worked in a variety of hospital nursing settings and chose to specialize and train in Oncology and palliative care nursing. She worked as Head Nurse of a radiation oncology unit at a large cancer center in Edinburgh, completed a MSc in Nurse Education in 1991, and taught sessions at the University of Edinburgh on cancer and palliative nursing. In 1992 she married a Canadian, moved to Prince George and has since worked in a variety of positions as Home Care Nurse, Nurse Educator for Home Nursing, and in casual positions at PGRH. In 2005 she took the position of Palliative Care Co-ordinator for Prince George. She helped to develop the new NH Hospice Palliative Care Program and her role in the NH HPC Consultation Team is now HPC Nurse Consultant for Prince George. Cathy has 2 girls and in her spare time likes to garden, read, cross country ski and get home to the UK as often as possible.

FOCUS ON NI HPC NURSE CONSULTANTS

Judy Lett grew up in Edmonton Alberta, oldest
of five children. Completed an RN at University of Alberta Hospital (75), BScN with distinction at Uof A(85) and MSc at McGill University (Gerontological Nursing/ Epidemiology) (94). Has 3 adult children, aged 30, 27 & 24, all of whom now live in Vancouver. Lived and worked in a wide variety of locations including Edmonton, Alberta; Mkar, Nigeria, The Pas, Manitoba; Cleveland, Ohio; Yaounde, Cameroun; Dawson Creek, BC; Montreal, Quebec; Jimma, Ethiopia; Kelowna, BC & finally Prince George, BC. Worked in French in Jonquiere, Quebec; La Chaux de Fonds, Switzerland; and Yaounde, Cameroun. Worked in French in both Africa & Quebec. Worked in Acute Care: surgery, obstetrics, medicine, special care, ER; Public Health; Community Health; and Nursing Education and Research. Specialized in Gerontological Nursing x 10yrs (community, acute & residential), but always with a major interest in palliative care, ethics and quality of life issues. Co-chair of the NI Ethics Committee x 8 yrs and also sits on the NH Regional Ethics Committee. Joined the Hospice Palliative Care Team as a nurse consultant in 2006. Spends many hours on weekends hiking (in summer), snow shoeing (in winter) exploring the surrounding mountainous country with husband, local writer & outdoorsman, Mike Nash or with friends from a variety of local outdoor clubs. Also enjoys canoeing, yoga, CNC films, live theatre, the symphony and bellydancing.

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All information provided in newsletter is in accordance with our endorsed text: “Medical Care of the Dying”, 4th Edition, Victoria Hospice Society.