STRONG HEALTH

STRONG MEMORIAL HOSPITAL
CHILDREN'S HOSPITAL AT STRONG

Pain Assessment and Management

Educational Module for All Health Care Providers at

Strong Memorial Hospital and Children's Hospital at Strong

Filename: c:\sarosdm\copydir\smh1137.f3f, Date: 11-25-103 10:47:20
Sheet: 1, Copy: Front, Scale: 100%, Type: Manufacturing

Table of Contents

Section 1: Introduction and JCAHO standards

In 2000, the Joint Commission on Accreditation of Healthcare Organization (JCAHO) developed formal standards of care for the assessment and management of pain. Since the JCAHO views pain management as a particularly integral component of care, it has expanded the scope of its pain management standards. Although pain is a common finding in many diseases, injuries, and conditions, it does require specific and explicit attention. The JCAHO standards are as follows:

All healthcare organizations must:

- Recognize the right of individuals to appropriate assessment and management of pain
- Assess the existence, and, if present, the nature and intensity of pain in all patients, residents and clients
- Establish policies and procedures that support the appropriate prescribing or ordering of effective pain medications
- Educate patients, residents, and clients and their families about effective pain management
- Address the individual's needs for symptom management in the discharge planning process
- Incorporate pain management into the organization's performance measurement and improvement program

(JCAHO, 2000)

As part of our implementation of the JCAHO standards, we have designed this basic self-learning module for physicians, nurses and other professional support staff who care for patients within Strong Memorial Hospital (SMH) and Children's Hospital at Strong (CHaS). The information provided in this module reflects general pain management care issues across the lifespan (neonates through geriatrics) and across the continuum of care (both outpatient and inpatient).

In addition to this basic self-learning module, ongoing educational updates will be provided to all medical, nursing and other professional staff reflecting recent advances in pain management and a review of current pain policies and practices.

Filename: c:\sarosdm\copydir\smh1137.f3f, Date: 11-25-103 10:47:32
Sheet: 2, Copy: Front, Scale: 100%, Type: Manufacturing

Section 2: Basic Primer on Pain

A. Definitions of Pain

Several definitions of pain are well accepted in the literature and recognize the subjective nature of the pain experience:

- "Pain is whatever the experiencing person says it is, existing whenever the experiencing person says it does" (McCaffery, 1999).

- "Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage or both" (International Association for the Study of Pain, 1994).

Pain can be defined further according to its duration, location and etiology:

- **Acute pain:** Usually the result of acute trauma, illness or surgery, that resolves once the underlying condition has been treated or improves; lasts less than three months, but, occasionally, can persist up to six months depending upon the type of injury and/or treatment rendered; often (but not always) associated with objective, physiologic findings such as tachycardia, hypertension, diaphoresis, mydriasis and pallor.
- **Chronic pain:** Persists beyond the expected recovery time, generally longer than three to six months; usually not associated with the autonomic nervous system response seen in acute pain, but instead associated with sleep difficulties, loss of appetite, irritability, decreased motor and/or sexual function and depression.
- **Malignant pain:** Associated with cancer or its treatment; may include pain related to HIV infection or AIDS; may be either acute, chronic or have characteristics of both.
- **Non-malignant pain:** Associated with non-malignant processes (e.g. arthritis or other musculoskeletal disorders); can also be present with no clearly defined medical disorder; may be either acute, chronic or have characteristics of both.

Pain may also be classified according to the site of pain origination:

- **Somatic pain** originates in bone, skin, ligament and muscle and is well localized; generally described as aching, throbbing, or gnawing.
- **Visceral pain** originates in solid or hollow organs; is initiated by distention, traction or ischemia; is generally poorly localized and may be referred to other areas; usually described as cramping, pressure, deep aching, or squeezing.
- **Neuropathic pain** stems from dysfunction and/or lesion of the central or peripheral nervous systems and may be associated with neurologic deficit or altered sensation; generally described as burning, electrical shock, hot, stabbing, shooting, numbing, itching, or tingling.

Although it may be difficult to assess the type of pain a person is experiencing, especially in the young, nonverbal and/or cognitively impaired, it is important to differentiate between these various types of pain. Different types of pain necessitate different methods/medications for management. For example, somatic and visceral pain responds better to opioids and NSAIDs while neuropathic pain also responds to antidepressants, anticonvulsants and other adjuvant medications.

Other terms that are critical to define because of common misunderstandings about their meaning are:

- **Tolerance:** Need for gradually escalating doses of medication to maintain an equal analgesic effect over time.
- **Physical Dependence:** Biologic response to chronic opioid administration characterized by onset of withdrawal symptoms when opioids are stopped or antagonist administered. Withdrawal symptoms include: sweats, chills, tremors, increased pain, diarrhea, nausea, vomiting, and runny nose.
- **Addiction:** Concomitant behavioral pattern of drug use characterized by craving for drug and overwhelming involvement in obtaining and using drug for reasons other than pain control. Actual risk for addiction in medical use is very low.
- **Pseudoaddiction:** Under-medication for pain can lead to behaviors that mimic addiction. These behaviors subside when pain is adequately treated.

B. Myths and Truths About Pain

Myths about pain continue to be perpetuated by both health care professionals and the public. Most myths persist because of lack of knowledge about pain, its characteristics and/or its management. Since patients and their families may consider many of these myths to be true, all health care providers need to be familiar with them to enable clarification.

COMMON MYTHS

MYTH	TRUTH
Infants and young children do not feel pain and therefore do not require as much pain medication	All children, regardless of age, feel pain and should be properly treated. Doses must be adjusted according to weight and age.
Children do not remember painful experiences	Numerous studies validate that infants have memory of painful experiences.
Children and adults will tell you when they are in pain	Many children and adults will not admit that they are in pain for many reasons: fears or misperceptions about the cause of their pain, fear about side effects of medications, or feeling a need to be stoic about their pain.
The use of opioids for pain relief can lead to addiction	It is extremely rare for addiction to occur as a result of using opioids for pain relief.
Strong pain medicines aren't appropriate and/or cannot be tolerated by elderly patients	Medications appropriate for pain should not be based on age but on the patient's medical condition and ability to tolerate adverse effects. Initial opioid doses should be adjusted downward in the elderly.
Objective/visible signs are necessary to verify existence and severity of pain	A patient's self report is the most reliable indicator of pain. Some patients with severe acute pain and many patients with chronic pain may not display any visible or overt signs.
Activity level is a good indicator for severity of pain	Activity level may or may not be affected when someone is in pain.
Experience with pain leads to greater tolerance	Assessing prior pain experiences is critical to understanding the patient's needs as this may affect coping with the current pain condition.
Mood has no effect on pain	The meaning a person associates with pain can play a critical role in the pain experience. Anxiety, fear and depression do not cause pain but can accentuate its perception and decrease coping ability.
Narcotics should be limited in dying patients because the medicines could hasten death	At the end of life, the goal of pain management is to achieve and maintain comfort. Good pain management is more likely to prolong life then shorten it. Consultation with the Palliative Care Specialists, Anesthesia Pain Service, Chaplaincy Office, Child Life Program, Ethics Consultation Service, etc., may be helpful in difficult cases.
Cultural practices and/or spiritual beliefs are not important in management of pain	Many cultural practices and spiritual beliefs can impact pain assessment and management. Health care providers need to incorporate these practices and beliefs into an individualized pain management plan.

C. Effects of Pain: Physiological, Psychological, Spiritual/Cultural

Pain causes physiological, psychological, emotional, and spiritual effects. These effects are variable, depending on an individual's age, past experiences with pain, psychological characteristics, sociocultural background and spirituality. Examples are listed below:

1. Physiological Effects of Pain

a. Acute Pain

System	Physiological Effects
Cardiovascular	↑ heart rate, ↑ blood pressure, ↑ cardiac output, ↑ peripheral vascular resistance, ↑ myocardial oxygen consumption Premature babies, neonates and infants may exhibit a wide variety of cardiorespiratory responses to pain: bradycardia or tachycardia, hypo or hypertension, apnea, bradypnea, tachypnea.
Respiratory	↓ flows and volumes from splinting resulting in tachypnea, bradypnea or apnea, ↓ cough, atelectasis, hypoxemia, hypercapnea
Gastrointestinal	↓ gastric and bowel motility, emesis
Genitourinary	↓ urinary output, urinary retention
Musculoskeletal	fatigue, immobility, muscle atrophy and contractures Premature babies, neonates and infants may exhibit, hypo or hypertonicity.
Immune	depression of immune system
Cognitive	reduction in cognitive function, mental confusion, loss of developmental milestones in children
Quality of life	sleeplessness, anxiety, fear, hopelessness, depression, decreased peer/parent interaction

b. Chronic Pain

Objective, easily measured physiological effects are often absent in chronic pain. However, patients often have fatigue, altered sleep patterns, decreased appetite, and other neuropsychological symptoms.

2. Psychological/Emotional Effects

a. Acute Pain:

Unrelieved acute pain, i.e., procedural related pain, postoperative pain, pain secondary to illness or trauma, may result in both short and/or long term adverse psychological effects. Repetitive painful procedures without adequate analgesia can create anticipatory fear and anxiety. Patients often describe feeling victimized, violated, and even attacked when forced to endure painful procedures without pain control.

At higher risk for psychological effects of unrelieved pain are patients with cognitive limitations, or those who have not attained sufficient cognitive development to understand the pain experience, such as infants, children or persons with developmental disabilities.

Anxiety often accompanies pain, and is characterized by excessive worrying, restlessness, irritability, muscle tension, disturbed sleep, feeling easily fatigued, and difficulty concentrating. *Anxiety is not easily assessed/evaluated in infants and young children but can manifest itself as disturbances in normal sleep patterns, decreased appetite and increased need for parental comfort.*

b. Chronic Pain:

Patients with chronic pain have an increased incidence of depression, suicidal ideation, anxiety, somatization, sleep disturbances, substance abuse, and personality disorders. These changes in mood are often related not only to the pain itself, but also to quality of life changes that often accompany chronic illnesses, such as changes in occupational and/or financial status, role identity, family relationships, and decreased recreational and social interactions.

3. Spiritual/Cultural Effects

The presence of pain and/or its treatment may significantly influence a patient's ability to use his/her faith and or cultural traditions. Patients in pain may exhibit either an increase or decrease in dependence on their faith tradition (e.g. anger at God for allowing pain versus acceptance of pain as evidence of God's care).

The side effects of pain medications may prevent a patient from utilizing their faith or cultural practices as fully as they desire. Often, patients may prefer to have some pain as long as they have full ability to use their faith/cultural traditions. Caregivers must be aware of these nuances of pain management and individualize care.

In addition, and especially for pediatric or non-verbal patients, there needs to be careful assessment of the impact of pain and its management on the family's spiritual and cultural framework. A negative impact on the family in this area may significantly affect their ability to support the patient's belief system, particularly when they have the same beliefs.

D. Factors Contributing to the Pain Experience:

Many factors may affect the perception of pain. Listed below are the ones that should be considered when assessing/managing a patient with pain:

- Age and developmental level
- Individual and/or family psychological factors
- Psychosocial, cultural and spiritual support systems (either internal or external). Since many spiritual and cultural factors can impact the pain experience, it is essential to determine these factors from the patient and family by asking questions such as the following:
  - When you are in pain, does/do your faith, religious practices, family traditions, etc. help you to cope?
  - In what ways do your faith, religious practices, family traditions, etc. provide support or comfort in dealing with pain?
  - Are there ways that we can increase your comfort in utilizing your faith, religious practices, family traditions, etc. while you are here?
- History of depression, anxiety or other psychiatric disorders
- History of substance abuse/drug addictions/alcoholism
- Prior pain experiences including the type of pain experienced
- Effectiveness of past and present, pharmacologic/non-pharmacologic pain treatments
- Type of preparation for procedure, hospitalization and experience

Section 3: Patient Rights and Responsibilities

Upon entry to SMH/CHaS, every patient and/or family member receives a copy of the Pain Education Pamphlet (See appendix for sample brochure), delineating a patient's rights and responsibilities. As health care providers, we need to insure that all patients and families understand that pain assessment and management is a joint responsibility. When patients are unable to speak for themselves because of age, illness, disability or language barriers, we should enlist the support of individuals who can assist in this endeavor. SMH Interpreter Services or language lines are available for this purpose. Involving patients and their families in the pain management process may help facilitate increased comfort and satisfaction with the care provided.

Section 4: Pain Assessment

All patients cared for within SMH/CHaS must be screened for the presence of pain. This essential prerequisite to the management of pain should be done:

(1) On **initial contact** with the patient,
(2) **Whenever other vital signs are assessed/recorded** (blood pressure, pulse, temperature, respiratory rate) [pain as the 5th vital sign],
(3) **With any change in medical condition,**
(4) **After providing treatment for pain** and
(5) **With any complaints of unrelieved pain.**

Once it is determined that pain is, or is likely to be present, as many of the following ten components of pain should be incorporated into the **initial** pain assessment as appropriate and possible:

Ten Components	Questions to Ask
1. History of onset	How/when did your pain begin? When was the last time you were pain free?
2. Location	Where exactly is your pain?
3. Quality	What does it feel like (e.g., sharp, dull, burning, cramping)?
4. Intensity	How would you rate your pain now? Pain when it is the least? Pain at the worst? Pain on average? Use an intensity rating scale appropriate to patient's language, developmental and cognitive level (See Section 5 of this module).
5. Temporal Pattern	Is your pain constant or intermittent? If intermittent, frequency and duration of episodes; variability according to time of day, etc.
6. Aggravating Factors	What factors make your pain worse?
7. Alleviating Factors	What factors decrease your pain?
8. Associated Symptoms	What other sensations are associated with your pain (e.g., nausea, vomiting, dizziness, weakness, incontinence, itching, vasomotor changes)?
9. Previous Methods of Treatment	What treatments have you tried for your pain, e.g., medications, behavioral strategies or alternative therapies such as acupuncture, massage, herbal therapies? How effective have they been?
10. Impact of Pain on Quality of Life (for patients with chronic or recurrent acute pain)	What effect has your pain had on your quality of life? This information may not be feasible to gather on the initial evaluation, due to time or pain intensity, but should be gathered on subsequent contact with the patient. Areas to assess include: mood, sleep, appetite, functional status/activities of daily living.

Section 5: Pain Assessment Tools at SMH:

Objective pain assessment is essential to appropriate management of pain. For some patients, only physiologic and physical exam assessments are possible (pre-verbal, neurologically or developmentally compromised, post-anesthesia, etc.). However, for patients who are able to understand and communicate about their pain even in basic ways, a pain assessment tool should be selected that is appropriate to the patient's age and cognitive ability.

A. Most Frequently Used Pain Assessment Tools

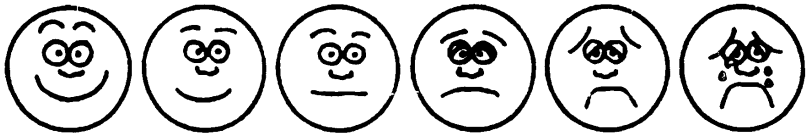
1. Numeric Scale for Pain Intensity (0 - 10):

For adults who are cognitively and developmentally appropriate. The care provider is to explain to the patient that "0" represents "no pain" and "10" represents "worst possible pain".

0	1	2	3	4	5	6	7	8	9	10
No Pain										Worst Possible Pain

2. Wong-Baker Faces Scale (0 - 10):

For children over the age of three, for adults who are cognitively or developmentally delayed, and for use with geriatric patients who are unable to use the numeric scale. The care provider is to explain to the patient that the "0" represents "no hurt" and the "10" represents "hurts worst".



0	2	4	6	8	10
No Hurt	Hurts Little Bit	Hurts Little More	Hurts Even More	Hurts Whole Lot	Hurts Worst

Filename: c:\sarosdm\copydir\smh1137.f3f, Date: 11-25-103 10:48:20
Sheet: 6, Copy: Front, Scale: 100%, Type: Manufacturing

B. Specialized Pediatric/Neonatal Pain Assessment Scales

1. FLACC scale (0-10): For children less than three years, except for infants in the NICU or newborn nursery.

FLACC Scale			
Categories	**0**	**1**	**2**
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid or jerking
Cry	No cry (awake or asleep)	Moans or whimpers; occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging or being talked to, distractible	Difficult to console or comfort

2. Neonatal Infant Pain Scale (NIPS) scale (0 - 7) for premature infants and neonates

NIPS PAIN ASSESSMENT SCALE			
	0	**1**	**2**
Facial Expression	Relaxed muscles Neutral expression	Tight facial muscles furrowed brow, chin, jaw	_____
Cry	Quiet - not crying	Mild moaning - intermittent cry	Loud scream, rising, shrill continuous or silent cry (intubated) as evidenced by facial movement
Breathing Patterns	Relaxed	Changes in breathing: irregular, faster than usual, gagging, breath holding	_____
Arms	Relaxed No muscular rigidity Occasional random movements of arm	Flexed/extended Tense, straight arms, rigid and/or rapid extension, flexion	_____
Legs	Relaxed No muscular rigidity Occasional random movements of legs	Flexed/extended Tense, straight legs, rigid and/or rapid extension, flexion	_____
State of Arousal	Sleeping/awake Quiet, peaceful, sleeping or alert and settled	Fussy Alert, restless and thrashing	_____

3. **CRIES scale (0 - 10)** for post-operative premature infants in the NICU

CRIES: Neonatal Postoperative Pain Assessment Scale			
	0	**1**	**2**
Crying	No	High-pitched	Inconsolable
Requires 0_2 for saturation > 92%	FiO_2 within 10% of preoperative value	FiO_2 11-20% higher than preoperative value	FiO_2 21% or more above preoperative value
Increased Vital Signs	HR and BP within 10% of preoperative value	HR or BP 11-20% higher than preoperative value	HR or BP 21% or more above preoperative value
Expression	None	Grimace	Grimace/grunt
Sleepless	No	Wakes at frequent intervals	Constantly awake

Section 6: Pain Treatment Guidelines

A. Pain Management Plan

A formal Pain Management Plan must be formulated and documented in the medical record by the prescribing provider, for:

- Every patient who has or is anticipated to have at least a moderate level of pain, defined as follows:
  1) Numeric Scale Pain $\geq$ 4 /10
  2) Wong-Baker Scale Pain $\geq$ 4/10
  3) FLACC Scale Pain $\geq$ 4/10
  4) CRIES Scale Pain $\geq$ 4/10
  5) NIPS Scale Pain $\geq$ 3/7

- Every patient who requests that his or her pain be treated (regardless of pain intensity score).

For clear and consistent documentation, the pain management plan needs to be documented in the progress notes or on service specific forms. The plan must address non-pharmacologic and pharmacologic interventions as appropriate to the clinical situation.

B. Pain/Sedation Resource Manual

A SMH/CHaS Pain/Sedation Resource Manual is available on each patient care unit and ambulatory care area. This manual includes the following sections:

1. SMH Pain Policy #8.15
2. Self Learning Module
3. Assessment of Pain
4. Non-pharmacologic Pain Management
5. Pharmacologic Pain Management
6. Invasive Modalities
7. Sedation
8. Special Populations
9. SMH/CHaS Pain Resources

C. Pain Expertise at SMH/CHaS

All health care providers are expected to understand the fundamental aspects of pain assessment and management. In addition, leadership on each patient care area/service will identify one or more registered nurses that either by training or by experience will have attained additional levels of expertise in the management of pain. These individuals will serve as unit/service pain resource nurses for general questions/issues that arise related to pain management.

For a specific patient care issue related to pain, the **first-level response** in addressing the pain problem will be the unit interdisciplinary team caring for that patient. If the unit team cannot resolve the pain management issue, an Advanced Practice Nurse, senior resident or attending physician from the primary or consulting specialty service as appropriate, may be contacted to provide assistance (**second-level response**). If this person(s) is unable to resolve the pain management problems (in most cases these are very complex pain issues), the Anesthesia Pain Service (APS) is available by formal consultation (**third-level response**). Health care providers at SMH should use this step-wise response to manage pain management issues, leaving only the most complex pain management problems for the Anesthesia Pain Service to handle.

The APS is available to provide consultation on pain management issues for inpatients with complex pain issues and to oversee the management of all patients receiving epidural analgesia (continuous and patient controlled). To make an inpatient referral, the primary service attending or designee should contact the APS via page at 16-7004. Consult requests are typically done within 24 hours.

The Outpatient Pain Service of SMH provides consultation and treatment for malignant and nonmalignant pain problems. This is a multidisciplinary service, which includes psychologists, nurse practitioners, and anesthesiologists. To make an outpatient referral, contact 275-3524 and give complete referral demographic information.

D. Types of Pain Treatment Interventions

Four types of pain treatment interventions are briefly described in this section. A more in-depth review/description of each can be found in the Pain/Sedation Resource Manual.

1. Non-pharmacologic Interventions

Non-pharmacologic interventions should always be considered in the treatment of pain. They may be used solely or in combination with pharmacologic interventions.

Intervention	Description
Activity /rest cycling	Alternating periods of activity and rest to reinforce return to normal sleep cycle and provide graduated activity appropriate to functional limitations.
Position changes	Changing position to improve circulation and relieve tense/ constricted muscles.
Distraction techniques	Focusing attention elsewhere, e.g., doing puzzles, video games, listening to music, reading.
Relaxation techniques	Structured training to relax specific muscle groups or for general decrease of anxiety.
Spiritual / pastoral support	Provide relief from pain by strengthening belief systems and providing comfort/support during periods of illness, trauma and/or stress.
* Exercise	Moderate, active exercise to decrease muscle spasm, improve patient functioning and self-image. Physical Therapy consult required for inpatient evaluation, and to initiate home exercise program, as appropriate.
* Cutaneous stimulation	Apply moist or dry heat or cold compresses and massage to aid relaxation and increase circulation.
* Counterstimulation	Transcutaneous electrical nerve stimulation (TENS): small non-invasive device that delivers low voltage electrical stimulation via wires attached to ECG electrodes, placed proximal or directly over the painful site.
** Acupuncture and Acupressure	Insertion of small needles or application of pressure at specific points along 12 meridian zones of the body
** Hypnosis	Using an induced and altered state of consciousness to maximize the individuals control over the perception of pain.

*Provider Order and/or Referral Required;
**Requires specialized training, limited availability for inpatient care at SMH

2. Complementary and Alternative Modalities

Patients may be using non-traditional therapies in the management of pain or have questions about them. The following list is provided so that SMH/CHaS staff may have some familiarity with the more common of these modalities and can discuss them openly with patients. However, it is important to recognize that these modalities have not been adequately studied and that mentioning them here should not imply a tacit endorsement of some or all of these therapies. Nevertheless, they may be helpful for individual patients.

Modality	Definition Used by Practitioners of These Modalities
Aroma-therapy	Therapeutic use of essential oils (volatile organic constituents of plants not synthetic scents)
Chiropractic Care	Spinal manipulation to treat pain and/or disease
Energy Healing	Reiki: energy focus through touch Therapeutic touch - exchange of life force energies between two or more people
Humor Therapy	Therapeutic use of humor in books, audio and video tapes, live performance, joke writing
Magnet Therapy	Use of magnets over the affected area; theorized that iron in RBC's respond to magnetic field, this increases circulation, decreases acidity and removes lactic acid from the inflamed area.
Manual Healing	Manipulation of soft tissues of the body to normalize those tissues; touch is the fundamental medium
Meditation	Intentional self-regulation of attention to focus on particular aspects of inner/outer experience
Music Therapy	Use of music experiences and the relationships that develop through them as dynamic forces to promote health

3. Pharmacologic

A wide variety of medications are available for the management of pain. In-depth dosage charts are included in the Pain/Sedation Resource Manual.

Medication Class	Indications	Route *	Actions	Potential Side Effects	Examples
Analgesic: Topical	Used for dermal anesthesia on normal intact skin prior to skin punctures. Used in patients with post herpetic neuralgia, diabetic neuropathy, reflex sympathetic dystrophy	Topical: ointment, patch	Stabilize neuronal membranes and block peripheral nerve impulses	Skin irritation (erythema and hives). ** With EMLA - methemoglobinemia in small infants **With Lidocaine ointment - rare systemic adverse reactions (light-headedness, confusion, nervousness, dizziness) **Caution in patients with hepatic disease.**	EMLA cream Lidocaine ointment Lidocaine patch (Lidoderm). Patch on for 12hr/off for 12hr
Analgesic: Acetaminophen	Used for mild pain and in combination with stronger pain medications	Oral, rectal	Antipyretic and analgesic	**Caution: In patients over 40 kg., liver toxicity potential if taking >4000mg/day**	

Medication Class	Indications	Route *	Actions	Potential Side Effects	Examples
Analgesic: Non-steroidal Anti-inflammatory (NSAIDS)	Used for mild to moderate pain and in combination with stronger pain medications. Ceiling effect; tremendous interpatient variability in response. Around the clock (ATC) dosing for best effect. Use for 7-10 days before changing to another NSAID	Oral, rectal, IV	Reduction of pain r/t soft tissue inflammation or bony destruction	Rash, decreased platelet aggregation, GI irritation, ulceration/bleeding **Cautious use in patients with impaired renal function, CHF, liver dysfunction, known GI disease and diabetes.**	Cox inhibitors-nonspecific: Aspirin Ibuprofen Ketorolac Naproxen Cox-2 Specific: Rofecoxib Celecoxib
Analgesic: Tramadol	Used for moderate to severe pain.	Oral	Low activity at mu opioid receptors; inhibits noradrenaline and 5HT neuronal reuptake	Nausea, vomiting, rash, itching **Caution: increased risk of seizures if concomitant use of MAO inhibitors or neuroleptics. Increased plasma levels if impaired renal function or liver disease**	Ultram
Analgesic: Opioids	Used for moderate to severe pain. Can be in combination form with Tylenol /ASA or pure opioid agonist	Oral, rectal, IV, SQ, patch	Block transmission of pain at opioid receptors in the brain, the spinal cord and the GI tract.	Respiratory depression (seen more often with opioid naïve patients), *constipation, *nausea, sedation, urinary retention, confusion/hallucinations, pruritus, myoclonic jerking. ***These adverse effects should be treated pre-emptively, with stool softeners/laxatives or anti-emetic medications respectively.**	Hydrocodone Codeine Oxycodone Morphine Hydromorphone Fentanyl Methadone
Antidepressants	Used for neuropathic pain and other chronic pain syndromes, e.g fibromyalgia	Oral	*Exact mechanism of action unknown; hypothesized to augment descending pain inhibitory pathways	Dry mouth, sedation, postural hypotension, tachycardia, blurred vision, constipation, urinary retention **Caution in patients with cardiac history, particularly prolonged QRS**	Amitriptyline Nortriptyline Desipramine Venlafaxine Paroxetine Fluoxetine
Anticonvulsants	Used for neuropathic pain	Oral	*Exact mechanism of action unknown; hypothesized to stabilize irritable nerve cell membranes to reduce pain transmisson.	Sedation, ataxia, vertigo, blurred vision, slurred speech, nystagmus, blood dyscrasias, altered liver function, skin changes **Monitor CBC and liver function tests**	Gabapentin Carbamazepine Phenytoin Lamotrigine
Antiarrythmics	Used for neuropathic pain	Oral	Block transmission of pain impulses	Oral agents-GI distress, heartburn, diarrhea, tremor, headache, rash, ataxia	Mexiletine Tocainide
Muscle Relaxants	Useful for pain related to spasm	Oral, IM, IV, IT	Reduce muscle spasm	Sedation, weakness, fatigue, nausea, constipation	Lioresal Cyclobenzaprine Tizanidine

*Routes: Not all medications in each category available by all routes specified

4. Invasive Modalities

These techniques require advanced training in administration/monitoring of the patient.

Modality	Description
Intravenous analgesia	IV delivery of pain medication by: Continuous dosing Interval dosing Patient Controlled Analgesia (PCA)
Epidural catheters	Local anesthetic and/or opioid delivered via epidural catheter by: Continuous infusion Patient Controlled Epidural Analgesia (PCEA)
Subcutaneous infusion	Subcutaneous infusion of opioid medications for pain management when alternative routes of administration are not effective. Commonly used for end-of-life pain management.
Nerve Blocks and Injections: • Axillary block • Celiac plexus blocks • Digital blocks • Dorsal penile block • Facet joint/medial nerve injections • Greater trochanteric bursa injection • Lumbar epidural steroids injection • Sacroiliac joint injection • Trigger point injection	Injection of local anesthetics and/or steroids into a specific area of the body to provide analgesia and/or anesthesia.
Sympathetic nerve blocks: • Stellate ganglion block • Lumbar sympathetic block	Injection of local anesthetic into the sympathetic nerve plexus to temporarily block the sympathetic nervous system in that area. Useful in Chronic Regional Pain Syndrome and peripheral vascular insufficiency patients.
Neuroablative procedures	Injection of neurolytic agents, cryo or radio-frequency ablation of different neural structures for pain relief.
Spinal cord stimulation	Stimulation of dorsal column of spinal cord via internal nerve stimulator to block pain sensation.
Implanted intrathecal infusion pump	Infusion of medication (e.g. opioid, local anesthetic, or lioresal) via catheter into the subarachnoid space for the management of pain or spasticity.

Section 7: Documentation Standards

As stated previously, a screen/assessment of a patient's pain must be consistently and carefully documented. Each patient care area has incorporated a place for this screen/assessment on their standard patient care forms. The pain screen/assessment must be documented for each patient during the admission process to the hospital or at an ambulatory visit. In addition, the prescribing provider should document their assessment/management of pain in the initial admission/outpatient note and subsequent notes as appropriate.

For hospitalized patients: When pain has been assessed as moderate to severe, interventions need to be documented and the pain reassessed at appropriate time intervals after the intervention. This will be documented on unit-specific patient care forms.

For ambulatory patients: When pain is present and assessed to be moderate to severe, the prescribing providers' recommendations for helping the patient manage pain should be documented as a part of the treatment plan. After implementation of the plan, re-assessment with documentation may occur with follow-up telephone contact or during a scheduled follow-up appointment.

Section 8: Patient/Family Education

All patients/families will be educated about their rights and responsibilities relating to pain management via the patient education pamphlet on pain that is provided to all patients at admission to either the inpatient units or ambulatory care facility.

For inpatients, patient education related to pain should be documented in the "Comfort" section of the Interdisciplinary Patient Education Record (SMH 1062 MR) and addressed upon discharge.

In Ambulatory Care, patients will be given instructions about how to manage pain at home and whom to call with questions or concerns about their pain management. Documentation can occur on one of the following forms: Interdisciplinary Patient Education Record (SMH 1062), Ambulatory Care Patient Instruction Record (SMH 1090), any unit specific patient education record, or post procedural patient instruction sheet.

Section 9: Health Care Provider Education

Completion of this self-learning module is the first step in the educational process for pain management. Ongoing education, provided to all appropriate health care providers, will be required and will include pain policy and treatment guideline updates and material identified by particular service areas as educational needs.

Filename: c:\sarosdm\copydir\smh1137.f3f, Date: 11-25-103 10:49:10
Sheet: 10, Copy: Front, Scale: 100%, Type: Manufacturing

Section 10: Quality Improvement Monitoring

The goal of this plan is to monitor outcomes that indicate a successful pain management program.

Monitoring will include:

- Measuring the compliance of staff completing the self-learning module
- Chart audits that include a review of documentation of pain as the fifth vital sign
- Questions added to the Hospital Patient Satisfaction Survey regarding the patient's perception of/satisfaction with their pain management
- Targeted studies of the management of specific types of pain in identified patient populations done by the appropriate interdisciplinary health care team

Section 11: SMH Pain Management Policy

UNIVERSITY OF ROCHESTER MEDICAL CENTER	STRONG MEMORIAL HOSPITAL POLICY	APPROVED BY: **Clinical Council**
Strong Memorial Hospital	SECTION 8. GENERAL PATIENT CARE	DATE: 10/16/2000
	8.15 Pain Management	PAGE: 1 of 2

Policy

Strong Memorial Hospital strives to continuously improve the pain management of its patients/clients through caring, discovery, teaching and learning.

Specifically, through its Pain Management Program, Strong Memorial Hospital will maximize its ability to prevent, minimize and optimally manage pain in all patients/clients. In collaboration with patients and families, it will optimize the level of comfort to enhance overall well-being and quality of life. The program is characterized by:

- timely pain assessments and interventions
- an interdisciplinary approach
- consistency in care delivery
- integration across the continuum of care (inpatient and outpatient)
- clear documentation, and
- effective outcomes.

Description

1. Patient Rights and Responsibilities
   a. Patients will be informed of their right to have:
      - information about non-pharmacologic and pharmacologic modalities available for acute and chronic pain, presented in ways appropriate to their cultural/social belief system, literacy and educational level, communication capabilities (including language barriers) and physical, cognitive and developmental status.
      - effective assessment, prevention and management of pain
      - timely interventions for the relief of pain
      - ongoing evaluation of their pain management plan.
   b. Patients have the responsibility to:
      - discuss any concerns about pain relief options with their health providers in an honest and consistent manner
      - notify their care providers when they are experiencing pain
      - participate in ongoing assessment of their pain
      - participate in developing and evaluating their pain prevention and management plan.

2. Pain Assessment
    a. All patients will be asked about the presence of pain, and if present, the quality, location, intensity and frequency of pain. This will occur both at the time of initial evaluation and subsequent regular reassessments.
    b. All patients with or at risk for pain or discomfort will be asked about their previous experiences with pain including the effectiveness of interventions used.
    c. Pain assessment tools will be appropriate for the patient's developmental, cognitive, and physical status. Their use will take into account communication difficulties and risks for chemical dependency.
    d. Patient self-report will be used as the primary indicator of pain where possible.
    e. When relevant, the effects of pain on general quality of life will be assessed.

3. Pain Treatment
    a. Any intensity of pain will be considered for management as appropriate to the patient's physical and psychological/spiritual well-being.
    b. Pain prevention strategies should be considered for all patients and implemented whenever possible.
    c. A formal pain management plan must be a part of the overall care management plan for all patients (inpatient and outpatient) with moderate to severe pain (e.g., $\geq 4/10$, $\geq 3/7$). The plan will be coordinated, timely, consistent across areas and care providers, and well documented in the patient's medical record.
    d. Formal interdisciplinary pain management guidelines and protocols will be established and used.
    e. The use of placebos is considered unethical and should be avoided unless given with informed consent or as part of a clinically approved research protocol or study.
    f. Expertise in pain prevention and management will be identified and available 24 hours a day, seven days a week.

4. Patient and Family Education
    a. All patients will be provided education about pain assessment, prevention and management individualized to their disease, injury or condition.
    b. The education will be appropriate to their cultural/social belief system, literacy and educational level, communication capabilities (including language barriers) and physical, cognitive and developmental status.

5. Health Care Provider Education
    a. Appropriate health care providers at Strong Memorial Hospital will be educated about pain prevention and management at the time of initial employment and/or medical staff appointment.
    b. Ongoing educational opportunities for all health care providers participating in direct patient care will include information about pain prevention, assessment, management, evaluation and documentation.

6. Program Evaluation and Monitoring

Ongoing evaluation and monitoring of the pain management program will be performed, will be data driven and address the following:

a. objective assessments of pain management practices,
b. patient/family and health care provider satisfaction, and
c. patient/family and health care provider education effectiveness.

Program evaluation outcomes will be disseminated to health care providers and administration to continually improve the pain management process at Strong Memorial Hospital.

8.15 History

8/00 Drafted by Pain Management Team
9/00 Reviewed and revised by Policy Management Team
10/00 Reviewed and approved by Clinical Council