

GLOBAL NEWS SERIES FOR HEMOPHILIA NURSES



July 2007 Issue

Message from the Editor

We are excited to bring you another year of the Global News Series and I would like to thank Baxter Healthcare Corporation for allowing us to continue to provide this resource for hemophilia nurses. The purpose of the Global News Series is to share knowledge, experience and current events among hemophilia nurses around the world, and is sponsored by an educational grant from Baxter Healthcare Corporation. Due to the variation in approved therapies and practices, we will not provide specific prescriptive recommendations or treatment guidelines. We appreciate the feedback that you have provided

and encourage you to continue to provide feedback on the current issue. We also appreciate your ideas and suggestions for topics to cover in upcoming editions. We need your participation as a subject matter expert in the development of this newsletter. To provide feedback, suggestions or express your interest as a subject matter expert, please e-mail us at contactus@solutionsight.com or write us at SolutionSight, Inc., 2191 Avalon Drive, Buffalo Grove, Illinois 60089. ❖

Cindy Jo Ping, RN, BSN, MBA, CPP

This Issue's Focus

Pain Management

Everyone experiences pain at different times in their lives in varying degrees. Pain can be a challenge for anyone, but when the person also deals with a chronic condition like hemophilia, the challenges can be even greater. Severe pain can affect our normal thought processes, interfere with relationships, shape our activities of daily living and take time away from school, work and recreational activities. Nurses involved in the care of people with hemophilia have an opportunity to act as an advocate of those with pain. However, pain must first be recognized. Understanding basic information about pain and its assessment allows you to empathetically explore options for pain management with your patients.

In this issue, we would like to share an exciting nursing study related to

pain management with hemophilia and von Willebrand disease (vWD). The initial findings of the study show that patients often do not understand their pain. Knowing this, the nurse has vital information that will assist the patient and healthcare team to make decisions about the management of pain.

Additionally, a basic overview of pain is presented with assessment information for use with your patients. Pharmaceutical treatment of pain is discussed as well as a multitude of non-pharmaceutical modalities of pain management. Examples of various pain management options are provided through two case studies. The page of assessment tools and pain log can be used in your work settings if desired. ❖

Advisory Board July 2007

We are pleased to introduce the subject matter experts for this edition of the Global News Series for Hemophilia Nurses, Nadine Alliaume, RN and Michelle Witkop, APRN, BC, ACHPN. Their knowledge and feedback, coupled with their expertise in pain management, have helped us create this edition for you. Nadine Alliaume is a Nurse Coordinator at the Regional Haemophilia Care Centre, Hôpital Edouard Herriot in Lyon, France. Michelle Witkop is a Nurse Practitioner at the Northern Regional Bleeding Disorders Center at Munson Medical Center located in Traverse City, Michigan, USA.

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Pain Management Websites

American Pain Society
www.ampainsoc.org

American Pain Foundation
www.painfoundation.org

American Chronic Pain Association
www.theacpa.org

American Academy of Pain Management
www.aapainmanage.org

American Academy of Pain Medicine
www.painmed.org

Society for Pain Practice Management
www.sppm.org

The Society for Fighting Pain, Israel
www.fightingpain.co.il/en/default.asp

American Board of Pain Medicine
www.abpm.org

Pain Management Information
Conventional & alternative treatments
www.pain-management-info.com

Institute for Pain Diagnostic
www.institut-fuer-schmerzdiagnostik.de/englisch.html

Help Roberto
Young boy who cannot feel any pain
www.helproberto.com

Human Pain Research Group, University of Manchester
www.hop.man.ac.uk/painresearch

Nature: Pain Mechanisms Poster
www.nature.com/nrn/poster

Workers' Compensation Board of Nova Scotia: Chronic Pain
www.wcb.ns.ca/chronicpain.pdf

National Institutes of Health Complementary and Alternative Medicine
http://nccam.nih.gov

American Society for Pain Management Nursing
www.aspmn.org

Munson Medical Center / Henry Ford Hospital National Pain Study
Research in hemophilia pain management
www.henryford.com/painstudy
(800) 580-4347 (U.S.)

Pain Management National Pain Study

The National Pain Study⁴⁴ for persons with bleeding disorders is being conducted by Munson Medical Center and Henry Ford Hospital, both institutions in Michigan, USA. To be eligible to take part in the study, the person must be 18 years of age or older and have a bleeding disorder. The pilot study involved six hemophilia treatment centers in three U.S. states: Michigan, Ohio and Indiana. The respondents were patients with hemophilia and von Willebrand disease.

Findings:

- The pilot study found that people were unable to distinguish between their acute and chronic pain. Similar words were used to describe both types of pain, such as aching, throbbing, tender and sharp. There was no difference if the patient was younger than 30 or older than 30, male or female.

Treatment of Pain: It was anticipated that acute pain would be treated with factor, an appropriate response, and chronic pain would be treated with other options.

Use of Factor in Acute and Chronic Pain

	Acute Pain	Chronic Pain
% of patients using factor to treat pain	79% (appropriate)	38% (inappropriate)
% of patients using options other than factor	21%	21%

These findings indicate that many people cannot tell the difference between acute and chronic pain, and therefore, may not treat their pain appropriately.

Use of rest, ice and compression: It was anticipated that 90% of patients in the study would use these methods appropriately.

Use of Rest, Ice and Compression in Acute and Chronic Pain

	Acute Pain	Chronic Pain
% of patients using rest to treat pain	82%	64%
% of patients using ice to treat pain	46%	75%
% of patients using compression to treat pain	30%	30%

Plans:

- Build liaisons with international pain groups to address pain in bleeding disorders.
- Create additional assessment tools for pain.
- Develop a Pain Resource Nurse (PRN) Program for nurses working in hemophilia. The PRN Program, originally offered at the City of Hope National Medical Center in California, USA in 1992, is an innovative strategy to develop pain resource nurses within an organization to function as pain management experts for other staff members. Part of their role is to provide pain management education and consultation, as well as act as an agent for change.¹ ❖

For more information, go to www.henryford.com/painstudy or call (800) 580-4347 (U.S.)

Pain Management

Overview: What is Pain?

Definition of Pain

The American Pain Society and International Association for the Study of Pain define pain as, “. . . an unpleasant sensory and emotional experience associated with actual or potential tissue damage . . . Pain is always subjective.”² McCaffery and Pasero state: “Pain is whatever the experiencing person says it is, existing whenever he says it does.”³ It has many aspects and is different for everyone.

Physiology of Pain

There are two major types of pain.⁴ **Neuropathic pain** arises from the abnormal processing of sensory input by the peripheral or central nervous system. **Nociceptive pain** is classified as somatic (bone, joint, muscle, skin or connective tissue) or visceral (organs, such as the GI tract) pain.

Nociception is the normal processing of stimuli that damages normal tissues or has the potential to do so if the stimuli are prolonged. The four basic processes involved are:

- **Transduction:** uncomfortable stimuli in sensory nerve endings are changed to impulses.
- **Transmission:** impulses move from the nerves to the brain.
- **Perception:** recognizing, defining and responding to pain.
- **Modulation:** activation of pathways that inhibit pain transmission.⁵

Classification of Pain

Acute pain is mild or moderate pain lasting from zero to seven days, but may last up to six months. The cause is known, such as a joint bleed, or may be unknown. Treatment starts immediately and focuses on the cause of the pain. Chronic pain

persists more than six months, is ongoing, with a non-life threatening or unknown cause. With chronic pain,



there has been no response to current treatment methods, and the pain may continue for the remainder of the patient's life, such as arthritis caused from repeated joint bleeding.⁶ Treatment focuses on pain reduction. Pain and illness have an emotional impact as well. When someone is afraid of their

pain, it can lead to avoidance of certain actions or activities. Anxiety and depression can make chronic pain more difficult to treat, may lead to isolation, immobility and must often be addressed before pain management can be effective.

Pain Assessment

Proper assessment of pain is often a primary barrier to treatment.⁷ Prompt assessment can lead to appropriate treatment as soon as possible:

- **Location:** Where is the pain? Does it radiate? If so, to where?

- **Description of the pain:** Have the patient describe the pain in his own words.
- **Intensity or strength:** Measured by various tools – faces, color or number scales or descriptive words. Identify the assessment tool based on the patient's developmental stage, learning level and culture. Determine the functional pain goal (pain level that is acceptable to live with) and how his daily pain relates to this goal.
- **Duration of pain:** When did the pain start? How long does it last?
- **Alleviating or aggravating factors:** What makes the pain better or worse? What treatments or medications reduce the pain?
- **Associative factors:** What symptoms go along with the pain, such as nausea, constipation, fatigue or depression?
- **Impact of pain on a person's life:** How does pain affects sleep, appetite, socialization, relationships, sexual activity, work and hobbies?

“Pain is whatever the experiencing person says it is, existing whenever he says it does.”

Documentation of Pain

Keeping a log of pain symptoms, treatment modalities and outcomes allows the patient and the health-care provider to better understand the pain.

Consistent use of the log is important. This gets the patient involved, allowing him to feel that his pain is being taken seriously. ❖

Key Term

Nociception: commonly used term to describe the perception of pain; an unpleasant sensation. Four processes are involved: transduction, transmission, perception and modulation.

Pain Management Treatment Options

PHARMACEUTICAL TREATMENT OF PAIN

Medications are identified as either over-the-counter medications, also known as OTCs; or prescription medications, which must be prescribed by an approved healthcare provider. Opioids are another large group of pharmaceuticals used for pain management; some are short-acting while others are long-acting medications.



Paracetamol, known as **acetaminophen** in the U.S., is a popular over-the-counter painkiller around the globe because it is remarkably safe and does not irritate the stomach.³⁴ It is a mild to moderate analgesic with antipyretic properties, often used for pain with hemophilia. It is not useful in reducing inflammation or swelling of the joints or skin because it has no clinically useful anti-inflammatory properties. Many pain drugs are a combination of paracetamol/acetaminophen and other medications. These combination medications may provide greater relief.

The Journal of the American Medical Association (JAMA) reported a link between a person taking acetaminophen in the amount of 4g per day and elevated liver function tests. The liver function studies showed a rise of more than three times the upper limits of normal when 500mg acetaminophen were consumed every six hours for up to 14 days. This means that higher doses of paracetamol/acetaminophen may cause damage to the liver.³⁶

Non-steroidal anti-inflammatory drugs, called NSAIDs, decrease in-

flammation in the body. Some NSAIDs may increase the risk of bleeding, therefore, limiting their use may be important. COX-2 enzyme inhibitors, a newer class of NSAIDs, lower incidence of gastrointestinal side effects.³⁸ Often times, a short-acting pain medication may be combined with paracetamol/acetaminophen or a NSAID to maximize results.

Lidocaine and Perilocaine topical cream is a eutectic mixture of local anesthetics. Dermal analgesia is a result of the migration of anesthetics into the epidermal and dermal layers of the skin. The agents accumulate in the vicinity of pain receptors and nerve endings in the skin. This prevents the initiation and conduction of nerve impulses, thereby affecting local anesthetic action. Lidocaine and Perilocaine topical cream provides dermal analgesia; the depth of which depends upon the application time and the applied dose. This is indicated for topical analgesia of intact skin with needle insertion, such as factor infusion or prior to blood sampling.⁴³

Short-acting **opioid medications** are best for intermittent pain, not chronic daily pain. Effects usually last about four hours. Some examples are: Ultram[®] (tramadol hydrochloride), Vicodin[®] (hydrocodone bitartrate/



acetaminophen), Vicoprofen[®] (hydrocodone bitartrate/ibuprofen), Darvocet[®] (propoxyphene napsylate/acetaminophen), OxylR[®] (oxycodone hydrochloride), MSIR[®] (morphine sulfate), Dilaudid[®] (hydromorphone hydrochloride), Di-Antalvic[®] (dextro-propoxyphene plus paracetamol), Efferalgan[®] (codeine), Co-doliprane[®] (codeine) and Darvon-N[®] (dextro-propoxifen napsylate).

Long-acting opioids need to be taken on a schedule, like most prescription drugs. They are single medicines, not combined with any other drug and are usually taken every 12 to 24 hours and used most often for chronic, daily pain. Some examples are: methadone, morphine, fentanyl and fentanyl transdermal, ketobemidone and oxycodone.

Challenges with Pain Medication

Depending on several individual factors, a tolerance to drugs can develop. When this occurs, the effect of the drug is not as strong as when it was initially taken. A person may need more of the drug to get the same effect. The body may also adapt to unwanted side effects of the drug such as slower breathing, fatigue or nausea.

Physical dependency

refers to a state in which a person's body becomes physically dependent on a certain drug. If it is stopped suddenly, the body recognizes this sudden absence of the drug and withdrawal symptoms can occur. Physical dependency is an expected outcome with some medications that are used due to the nature of the medication. Dependency does not, in and of itself, imply addiction.

View the brand names of paracetamol in different countries.³⁵
http://en.wikipedia.org/wiki/List_of_paracetamol_brand_names

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Withdrawal is what happens to a person physically and psychologically when certain drugs they have been taking are stopped immediately. The effects can be very intense for patients, with varied results. Pain can return to the same levels they had prior to treatment, or they may experience symptoms such as insomnia, anxiety, abdominal cramping, diarrhea, muscle twitching, headaches, seizures, etc. If a drug is going to be discontinued, the healthcare team can recommend a plan to help the patient with dosing.

Pseudoaddiction is a condition that may occur when pain is not controlled adequately. The person may watch the clock, waiting for the next dose of medication, and may otherwise appear to be "drug seeking." Illicit drug use and deception can occur in the person's effort to find relief. Pseudoaddiction can be distinguished from true addiction in that with pseudoaddiction, the behaviors resolve when the pain is treated effectively.

Addiction to drugs is a psychological dependence that occurs with a persistent pattern of compulsive use. Similar to other diseases, addiction is a primary, chronic disorder with genetic, psychosocial and environmental factors influencing its development. There is a loss of control over the drug, evidenced as a continual craving for the drug. There may be a preoccupation with obtaining the specific drug, despite the fact that there is something else they are using for pain relief. Taking pain medication does not automatically lead to addiction.

NON-PHARMACEUTICAL TREATMENT OF PAIN

With many non-pharmaceutical treatments available for pain management, communication between the healthcare team and the patient is

essential in finding the right combination of pain management options. Consideration of the individual patient and his bleeding disorder is important, and needs to be evaluated as you make final decisions about what is appropriate for each patient.

Activity/Exercise

Although it might sound strange, activity and exercise are good tools to use when dealing with pain. One of the benefits of activity and exercise is well-developed muscles. Strong musculoskeletal systems are better able to withstand traumas of daily living and have fewer spontaneous bleeding episodes, leading to less pain.¹² Strong muscles can best be achieved through regular physical exercise. Activity also makes a person feel better, in general, by the release of a

variety of chemicals in the body. Certain neurotransmitters, like serotonin and norepinephrine, are increased with exercise resulting in potential mood-enhancement.¹³ Endorphins, the chemicals released by the pituitary gland in response to stress or pain, interfere with the transmission of pain impulses to the brain.¹³ Exercise stimulates the release of endorphins

within approximately 30 minutes from the start of activity.

R.I.C.E.

Rest, ice, compression and elevation are easy to use modalities that offer very effective results (see sidebar).

Physical Therapy

Physical therapy techniques use gentle, low-resistance muscle strengthening and work with the patient's balance and coordination. Benefits are noted, such as: improved muscular strength, decreased stress to the joints and a lower risk of joint damage.¹⁶

Hydrotherapy

Hydrotherapy, the treatment of the body with water, has been used for many centuries in treating pain.

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Best Practice R.I.C.E.

Rest.I.C.E.¹⁴

- Rest affected area
- Possible non-weight bearing activities
- Use of splints or crutches, if necessary

R.Ice.C.E.¹⁴

- Superficial vasoconstriction leading to pain reduction and reduced metabolic rate¹⁵
- Local anesthesia produced by a reduction in rate of conduction of sensory nerves¹⁵
- Change in local circulation
- Apply ice for no longer than 20 minutes at a time, 4 to 8 times per day¹⁴
- Use crushed ice, cold pack or frozen bags of peas or corn

R.I.Compression.E.¹⁴

- Prevents and/or reduces swelling
- Use an elastic wrap or compression bandage, but not too tightly
- Wrapped area should not hurt or throb from the bandage



R.I.C.Elevation.¹⁴

- Elevate the extremity as often as possible
- Elevate the injury above the level of the heart with pillows, etc.
- Reduces swelling
- Use pillows generously to assist with elevation

Alternative Medicine

Acupuncture

Acupuncture is a form of Asian medicine with a history of many thousands of years. Over the last decade, it has received greater acceptance, with many studies undertaken to investigate its effectiveness. It is the technique of inserting and manipulating needles into acupuncture points on the body. According to acupunctural teachings, this will restore health and well-being, and is particularly good for treating pain. Studies have been completed in the last few years pointing to the effectiveness of acupuncture in treating pain associated with hemophilia.^{30,31}



Aromatherapy

Aromatherapy is a form of complementary medicine that uses plant compounds, some known as essential oils. The purpose of aromatherapy is

to positively affect a person's mood or health. Aromatherapy is a generic term that refers to any of the various traditions that make use of essential oils, sometimes in combination with other alternative medical practices and spiritual beliefs.³²

Herbal Remedies

Herbal therapies, sometimes called botanicals, are used in the arena of holistic care. Botanicals and herbal supplements are products derived from plants. They may be marketed as food products or nutritional supplements. Commercial preparations and potency vary. Care must be taken since many herbs can increase the potential for bleeding.³³



Treatment Options (continued from page 5) . . .

Through a variety of methods, warm and cold water are used to affect soft tissues and to stimulate the flow of blood and lymph to carry waste products away from cells. It also helps nourish cells and promotes regeneration of tissue. The ability to float in the water, due to buoyancy, decreases the pressure on the joints and helps improve balance and coordination.¹⁷

Cognitive-Behavioral Therapy

Cognitive-behavioral therapy focuses on current issues and symptoms versus more traditional forms of therapy that focus on a person's past history. Several essential features include: identifying and correcting inaccurate thoughts, helping the person get involved in more enjoyable activities more frequently and assisting in problem-solving abilities. People can learn more adaptive ways of thinking, feeling and behaving, therefore, changing the resultant behaviors or sensations, such as fear or pain.^{18,19, 20}

Distraction

Distraction is something that takes the mind away from the pain, making the person less aware of his discomfort. This is a method that can be used to refocus attention in a different direction. Talking and support from family, friends and community; learning new things, reading, watching a movie, playing on the computer or with board games, listening to music, enjoying nature, breathing deeply and playing with a pet are all opportunities for distraction.



Guided Imagery

Imagery has been considered a healing tool in most of the world's cultures. Advocates of imagery contend that the imagination is a potent healer that has long been overlooked by practitioners of Western medicine. Guided imagery directs you, usually by a voice on a tape or CD.

Through sight, sound or a combination of sensations, the person is encouraged to imagine healing conditions. Imagery can relieve pain and speed healing. It is using

the power of the mind over the body.²¹

Hypnosis

Hypnosis is easily and quickly learned by most people under the direction of a trained practitioner. It involves relaxation of the mind and the body and should be practiced when a person feels relaxed. The altered state of consciousness, often called the "trance state," is not unlike the times during a day when you become totally involved with something you enjoy, not really paying attention to other things around you, yet you are very present and able to respond.²² There are

different types of hypnosis. The Ericksonian method deactivates the left side of the brain (the conscious, rational, logical and verbal side) and activates the right side of the brain (non-verbal). A relaxed, meditative state results.⁴² Interestingly, studies have been done with



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For more resources and suggestions, log on to www.SolutionSight.com/July2007

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hemophilia patients that show through hypnosis, they can be trained to reduce their anxiety, further reducing the occurrence of spontaneous bleeds.²³

Biofeedback

Taught by a trained practitioner, biofeedback is a technique designed to help a person learn self-relaxation through the use of feedback equipment. When learning the process, equipment sends a signal, such as a tone or visual image that changes in proportion to a biologic process. The process of learning can best be accomplished when the patient is not currently experiencing pain. However, it is important to practice the technique in the presence of the practitioner and equipment during a pain episode to solidify the response. Goals may be decreased heart rate or rate of breathing, increased overall relaxation or decreased muscle tone.²⁴



Counseling

A professionally-trained counselor can provide many techniques and new skills to use when dealing with pain. They are trained to listen and help the patient determine the best options.

Cryotherapy

Cryotherapy is a noninvasive technique that uses a highly pressurized gas at very low temperatures. The

compressed gas passes through a narrow tube and expands at its tip. This results in thermal shock (skin temperature falls from 32°C to 2°C within 30 seconds). The use of extreme cold damages peripheral nerves and can provide pain relief for several months. Cryotherapy produces several effects including: analgesic effect/pain relief, vasomotor effect, anti-inflammatory effect and muscle relaxation.²⁵

Massage

Massage is the art and science of manipulating the soft tissues of the body for the purpose of normalizing those tissues. It consists of manual techniques that include applying pressure, holding and/or causing movement of the body. Massage increases the circulation of blood, reduces muscular tension, enhances tissue healing, increases ease and efficiency of movement and aids in relaxation.²⁶

Neuromuscular Therapy

Neuromuscular therapy focuses on the relationship between muscles and nerves using deep muscle massage with concentrated pressure on areas of muscle spasm. Due to the pressure, deep bruising can be an associated risk.²⁷ Taking this into consideration, minimum factor level requirements should be discussed and determined by the healthcare team. Rosted determined this level as 15%.³¹



Tai Chi Chuan

Tai chi chuan is a martial art as well as a regular form of exercise. It can provide a wide range of health benefits to the muscular, skeletal and circulatory systems. The flowing movements of tai chi chuan serve as a moving meditation that reduces stress and provides a way to cultivate body and mind.^{40,41}



Transcutaneous Electrical Nerve Stimulator (TENS)

A TENS unit is a non-invasive unit using low intensity electrical impulses to stimulate peripheral nerves. It inhibits the transmission of pain information along nerves and may release endorphins.²⁸

Interferential Stimulator

Interferential Current Therapy (IFC) is essentially a deeper form of TENS. These frequencies interfere with the transmission of pain messages at the spinal cord level. This deep tissue penetration can be adjusted to stimulate parasympathetic nerve fibers for increased blood flow. Interferential stimulation differs from TENS because it allows a deeper penetration of the tissue with more comfort (compliance) and increased circulation.²⁹

Integrative Therapy

Integrative therapy incorporates both traditional and non-traditional therapies, tailoring them to meet the individual need of the patient. The benefits are that the healthcare team can assist the patient in choosing the therapies that do the most good for the individual. ❖

Did you know?

TRPM08 Protein: Researchers studied how the activation of the TRPM08 protein elicits analgesia in neuropathic and other chronic pain models in rats.³⁹

Cold → Amelioration of pain → Activation of TRPM08

- TRPM08 is situated in certain nerve cells and responds to stimuli, such as cold ambient temperature or by chemical products (e.g., menthol)
- The TRPM08 protein inhibits the transmission of the pain messages to the brain
- **Conclusion:** Endogenous-cooling-induced analgesia, via TRPM08 activation, represents a novel analgesic axis that can be exploited in chronic, sensitized pain states.

Cultural Perspectives

Cultural variations and communication barriers may lead to challenges in pain management. Healthcare providers need to express a sincere interest in the patient's well-being and comfort. Attempts to non-judgmentally understand the patient's pain experience will assist in reaching a positive outcome with pain management options. Below is a list of components to consider when a cultural assessment is taken.¹¹



1. **Family systems:** nuclear or extended family, role or status of individual family members
2. **Social life:** daily routine of the patient and family; nutritional patterns; relationship to friends and community
3. **Language and traditions:** language spoken; patterns of verbal and nonverbal communication; personal space issues; major cultural traditions; need for interpreters
4. **Religion and spirituality:** religious beliefs and practices; relationship of religious beliefs to health practices
5. **Health beliefs and practices:** attitudes regarding health and illness; beliefs of the decision-maker regarding health issues; presence of folk remedies, rituals or healers
6. **Eye and physical contact/ tone of voice used with patient:** consider cultural implications



Pain Management Case Studies

Case Study 1

Mr. H. is 50 years old with severe hemophilia B. He comes to the treatment center in October 2006 with left elbow hemarthrosis. Cryotherapy is the treatment of choice, administered two cryotherapy sessions per day, one in the morning and one in the evening, two minutes in length, for a duration of three days. The daily sessions should be between three and 12 hours apart. Each session begins with 30 seconds on the lymphatic node of the articulation. This is followed by scanning the hemarthrosis area for one and a half minutes, resulting in thermal shock to the area. Once a day before cryotherapy, the following parameters are evaluated:

	Day 1	Day 2 AM	Day 2 PM	Day 3 AM	Day 3 PM
Measurement of articular range (° of range)	15	35	40	65	75
Measurement of the articulation perimeter (cm)	28.5	26	26	26	25
Measurement of cutaneous temperature (°C)	36	35	35	35	34
Quantification of pain with a visual measurement scale	5	1.5	1	0.5	0
Number of doses administered of FVIII or FIX	Betafact 3000IU	None	None	None	None

In conclusion: After the first session of cryotherapy, the patient regains an articular range and the pain decreases. He does not take a concomitant medication, such as analgesic or corticosteroid, and he needs only one infusion. The patient reports the therapy as positive for him. Six months later, he comes back to the treatment center for a second hemarthrosis, and he is pleased again with cryotherapy. ❖

Case Study 2

Henry is a 28-year-old man with severe hemophilia A. He has a target joint in his left ankle that has stage IV arthritis. During the winter, he would walk around town in search of a job (walking was his sole mode of transportation). He developed severe pain in his ankle that he felt was an acute bleed. The pain came on after walking over uneven, icy ground. There was some swelling, and he described the pain as sharp and aching. It did not resolve with the administration of factor, but it was better by the next morning. The pain would worsen as he walked again.

Henry was not good at keeping logs. The few logs he kept showed his normal prophylactic infusions at three times per week as well as about eight extra treatments for the month, although he admitted to weeks where he would treat himself almost daily without relief of his pain.

Initially, he was prescribed Celebrex 200mg twice daily. This helped decrease his pain by about 25%. He

continued to feel he was having acute bleeds and treated accordingly. He was seen by a physical therapist and had seven therapy sessions. He was given a leg brace to stabilize his ankle and stated he used it faithfully. He was also seen by a psychologist to initiate hypnosis but didn't want to dedicate the time to developing the technique. Every night he would ice and wrap his ankle.

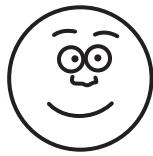
During his acute bleeds he would treat his pain with up to nine Lortab 10/500 tablets daily. This was concerning since he also had hepatitis C. He finally agreed to try methadone in an attempt to control his pain. Within one month, his pain was adequately controlled with methadone 5mg twice a day. He was back to only factor VIII three times a week and able to remain active in pursuit of his employment. He stopped having what he thought were "breakthrough" bleeds. The cost of his documented eight extra factor treatments for one month was over \$40,000. The cost of one month of methadone was \$23.00. ❖

Pain Management Assessment Tools

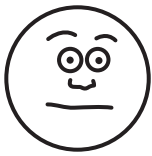
Wong-Baker Faces Scale^{9,10}



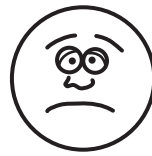
0
No hurt



1
Hurts little bit



2
Hurts little more



3
Hurts even more

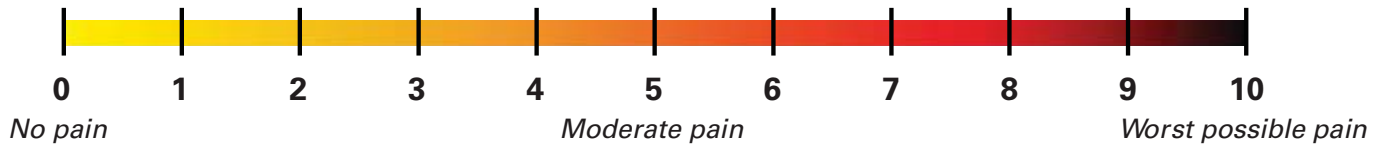


4
Hurts whole lot



5
Hurts worst

0 to 10 Numeric Pain Scale



Short-form McGill Pain Questionnaire

Patient Name:			Date:	
	None (0)	Mild (1)	Moderate (2)	Severe (3)
Throbbing				
Shooting				
Stabbing				
Sharp				
Cramping				
Gnawing				
Hot/Burning				
Aching				
Heavy				
Tender				
Splitting				
Tiring/Exhausting				
Sickening				
Fearful				
Punishing/Cruel				

Sample Pain Log

Date/ Time	Pain Scale (0 = no pain, 10 = highest pain)	Location of Pain	Treatment Used (RICE, activity, meds, massage, PT, acupuncture, etc.)	Name/ Dosage of Pain Medicine	Pain Level After 30 Minutes	Pain Level After 60 Minutes	Comments (What were the results of treatment, including pain medication?)

Upcoming Events Conferences

14 – 16 September 2007

40th Biannual Congress of ESPHI (European Society of Pediatric Hematology and Immunology)

Athens, Greece

E-mail: info@esphi.org

www.esphi.org

24 – 25 September 2007

5th WFH Global Forum on the Safety and Supply of Treatments for Bleeding Disorders

Montreal, Canada

E-mail: mbrooker@wfh.org

27 – 28 October 2007

III Simposio Latinoamericano sobre el Manejo Integral del Paciente Hemofílicos

Bogota, Colombia

E-mail: colhemof@sky.net.co

31 October – 1 November 2007

National Hemophilia Foundation's 59th Annual Meeting

Orlando, Florida, USA

www.hemophilia.org

9 – 11 November 2007

European Hematology Association Scientific Workshop on Immunogenicity of Coagulation Factors

Mandelieu (Cannes), France

E-mail: education@ehaweb.org

www.ehaweb.org

7 – 10 May 2008

American Pain Society

Tampa, Florida, USA

www.ampainsoc.org

1 – 5 June 2008

Hemophilia 2008 World Congress

Istanbul, Turkey

E-mail: msalas@wfh.org

www.hemophilia2008.org

3 – 6 September 2008

American Society of Pain Management Nursing

Tucson, Arizona, USA

www.aspmn.org/

Conference/index.htm



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