The pain of arthritis

For most people living with arthritis, pain is a daily issue. It can make it difficult to enjoy the things and people we love, and can often feel like a constant companion for people living with disease.

All told, arthritis pain affects tens of millions of people worldwide. According to the World Health Organization, musculoskeletal disorders are the most frequent cause of disability in the modern world, and the prevalence of this group of diseases (there are over 100 different types of arthritis) is rising.

All forms of arthritis are associated with pain, particularly when they are not well managed. Depending on disease type and severity, arthritis pain can range from mild and irritating to excruciating. Arthritis-related pain and disability affect many aspects of life including daily activities, leisure, labour force participation, and social activities. In fact, for people living with arthritis, the number one reason for loss of joint mobility and function is chronic or episodic pain.

In Canada, arthritis affects an estimated 4.2 million Canadians of all ages, with numbers expected to increase by 50% by 2020. Because of these numbers, arthritis pain is a key issue that must be addressed.

The impact of pain on the lives of people living with arthritis was evident in a survey conducted by ACE, in conjunction with other community members on the treatment needs of our community. When asked what issues arthritis patients wanted addressed in their lives, 80% of survey respondents stated they wanted to live with less pain. In fact, this was the number one priority of patients who responded to the survey.

In this issue we look at arthritis and pain. What is pain and what causes it, managing pain, treatments short and long term, and finally some suggestions for coping with pain.

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What is pain?
The International Association for the Study of Pain defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage”.

Pain is your body’s warning signal, letting you know that something is wrong in your body. When part of your body is injured or damaged, chemical signals are released that travel from nerve system cells (called neurons) to your brain where they are recognized as pain.

Most forms of pain can be divided into two general categories:

- **Acute pain** – this type of pain is temporary, lasting anywhere from a few seconds to a few hours and waning as your body heals. Some examples of things that cause acute pain include broken bones, cuts, burns or an injury to a joint that is affected by arthritis.

- **Chronic pain** – this type of pain is long lasting and can range from mild to severe. Often, chronic pain is associated with diseases, such as arthritis, and is not sufficiently relieved when treated because of the permanent damage to the body or nerve endings.

What causes arthritis pain?
Arthritis pain varies greatly from person to person. Even your own arthritis pain will vary from day to day. Each individual has a different threshold and tolerance for pain. This threshold can be affected by many things including: emotional and physical factors like stress, depression, anxiety and hypersensitivity at the affected areas, such as knees, hips or hands. The increased sensitivity affects how patients experience pain.

While scientists are not completely sure of why there is so much variation in how people experience their arthritis pain, we know that there are many factors that influence pain. These include:

- **Physical/biological factors:**
  - joint inflammation
  - damage to joint tissue caused by the disease process or wear and tear
  - muscle strain caused by overworked and overstressed muscles
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Managing pain

There are many ways to help control pain, including both short term and long term approaches to pain management. Additionally, some strategies focus on the physical and biological factors that influence pain, while others address emotional and social reasons for pain. Often, using a combination of methods is the best way to control your pain.

While forms of inflammatory arthritis and osteoarthritis may make use of different approaches to treating pain, each utilizes both short-term and long-term strategies.

Short-term pain treatments

Medications to address symptoms of disease

- pain relievers such as acetaminophen (Tylenol®)
- nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil® or Motrin®) or cox-2 drugs such as celecoxib (Celebrex®)

Application of heat and/or cold

- The use of heat, such as a warm bath, shower and a heating pad, as well as ice, such as a cold pack or bag of frozen vegetables can help to relieve pain in affected areas.
- Before you make the decision to use heat or cold for treating your arthritis pain, speak to your doctor as these methods are not suitable for certain types of arthritis.

Joint Protection

- The use of a splint or a brace allows joints to rest and can protect them from further injury. It is best to speak to your physician, as well as a physical and/or occupational therapist to ensure a proper fit for your body.

Massage

- Massage can provide temporary relief from sore muscles, increase blood flow, warm painful areas of your body and help you to relax.
- As with all types of pain relief, speak to your physician first and make sure your massage therapist is informed about your disease.

Transcutaneous electrical nerve stimulation (TENS)

- This is a small device that sends mild electric pulses to nerve endings beneath the skin in areas that are experiencing pain. It has been suggested that TENS may work by blocking pain messages to the brain and changing pain perception.

Marijuana (Cannabis)

- Marijuana is used by many people to relieve the pain from conditions such as arthritis, HIV and multiple sclerosis. In a recent editorial in the British Medical Journal (Jan. 2008, Vol.336), it is suggested that there is strong research to support the use of cannabis for chronic pain. However, it is also suggested that more research is needed to determine which conditions it is most useful for and the side effects. If this is something you would like to explore, it is important to speak with a doctor about the regulations governing medicinal marijuana use.

Acupuncture

- Many people use acupuncture as a way to deal with short term pain, however there is very little research to support its use. While research has shown that the penetration of needles provides small psychological relief, systematic reviews done by the Cochrane Collaboration and other academic research suggests that for pain in general and arthritis pain in particular, acupuncture cannot be shown to provide relief.

Long-Term pain treatments

Medications

- Corticosteroids
  - These steroids can help to reduce the inflammation associated with inflammatory arthritis. They can be taken orally or given by injection directly into the joint. Prednisone is the most common corticosteroid used in arthritis. They should be used as ‘bridge’ therapy while waiting for DMARDs (see below) to start working or for short courses. Long term corticosteroids are discouraged because of the significant side effects.

- Opioids
  - Opioids can be used to treat chronic arthritis pain. They do not work as well for inflammatory arthritis (RA, PsA) but for osteoarthritis, opioids may be very useful for chronic pain, especially when NSAIDs are contra-indicated or have been tried without success.

- Nonsteroidal anti-inflammatory drugs (NSAIDs)
  - These medications treat the symptoms of arthritis. While they are often used short term to reduce pain, they can also provide long term...
relief for some people with arthritis.

- **Disease-modifying anti-rheumatic drugs (DMARDs):**
  - This class of medications are used to treat the underlying disease for types of inflammatory arthritis such as rheumatoid arthritis. They work by targeting the underlying causes of inflammation. They are not used in osteoarthritis.

- **Biological response modifiers (biologics):**
  - Biologics are the newest class of treatment for inflammatory arthritis. As with DMARDs, these medications treat the disease at the biologic level by targeting the causes of inflammation within the body. People who do not respond well, or well enough, to a course of DMARDs and combinations of DMARDs may experience success on a biologic. These medications can reduce inflammation in the joints, which helps to reduce both the pain and the damage that causes pain.

- **Weight loss**
  - Weight loss is an important aspect of treating arthritis, particularly osteoarthritis. Excess weight puts stress on joints such as the knees or hips. For example, being 10 pounds overweight increases the force on knees by 30-60 pounds per step. Overweight women have 4 times the risk of knee OA and overweight men have 5 times the risk of knee OA.
  - Research in osteoarthritis has shown that even losing small amounts of weight substantially reduces the development of osteoarthritis and the pain associated with osteoarthritis.

- **Exercise**
  - Exercises such as swimming, walking, low-impact aerobic exercise, stretching and range-of-motion exercises can help to reduce joint pain and stiffness.

- **Surgery**
  - For some people with arthritis, it may be necessary to have surgery on joints that are damaged and painful. These may include:
    - Arthroscopy – the removal of debris or inflamed tissue in a joint through a small lighted instrument.
    - Synovectomy – the removal of inflamed joint tissue.
    - Arthroplasty – the replacement of part or all of a joint in the hip or knee.

**Alternative therapies**
- Many people living with arthritis pain use alternative therapies such as acupuncture, or supplements such as glucosamine and chondroitin sulphate. However, there is very little reliable research about the value of alternative therapies in treating arthritis pain. Before you make a decision to use alternative therapies, speak with your doctor as some of these therapies may interfere with your other treatments. For more information about glucosamine and chondroitin, please see the December 2006 issue of JointHealth™ monthly.

**Psychological and behavioural approaches**
- For some people, managing arthritis pain can be helped through the use of psychosocial and behavioural approaches such as cognitive behavioural therapy, coping skills training and educational programs such as the Arthritis Self Management Program.

**Coping with arthritis pain**

Pain should not be something that people with arthritis simply accept as an inevitable part of arthritis. However, while there are many approaches to managing pain, the first step is to admit that you are experiencing pain and to take action to address it.

In addition to the short and long term approaches, other coping mechanisms may include:
- Relaxation techniques
- Distraction techniques
- Cognitive behavioural therapy
- Meditation
- Counselling

**Ten Tips for Pain Management:**

1. Keep track of your pain – where is it, how long does it last and what changes it. It may be helpful to keep a “pain journal” so that this information is easy to keep track of.
2. As much as possible, eat a healthy diet. While people with arthritis often face challenges shopping for and preparing healthy food, eating well is an important component of a well-rounded arthritis management plan, and well-managed arthritis is less likely to be painful.
3. Try to get enough sleep. While getting to sleep and staying asleep may be challenging, well-rested people may have an easier time coping with arthritis. For more on healthy sleep with arthritis, please see the June 2007 issue of JointHealth™ monthly.
4. Consider joining a support group or seeing a counselor. Counselors with experience treating people with chronic pain may be able to assist with the development of coping strategies for dealing with pain.
5. Stay informed about new research on managing arthritis pain. The JointHealth™ family of programs has been designed to make new research about all aspects of living with arthritis available to the people who need it most, in easy-to-understand language. Visit our website at www.joinhealth.org for more information.
6. Speak with your physician honestly about your pain. People with arthritis often downplay the amount of pain they are in, because they do not want to appear to be “whining”. There is nothing to be ashamed about, and no need to “tough it out”. Your doctor may be able to assist you with pain management, but you need to explain your pain honestly first.
7. Try to keep your stress in check; use relaxation techniques to reduce stress. For more information about stress and arthritis, see the July / August 2008 issue of JointHealth™ monthly.
8. When possible, try to find ways to distract yourself so that you don’t focus on the pain. Reading a book, watching a movie, doing a crossword puzzle, or talking to friends and family may help to keep your mind off your pain.
9. Spend time doing activities that you enjoy, with people you enjoy being around. While it may seem very difficult, try to avoid isolating yourself from the things and people you love.
10. Once you have developed a well-rounded treatment plan with your treatment team, stick with it as much as possible. The components included in the plan, which may include medications, exercise, and physical therapy, are designed to work together to minimize pain. Speak with your doctor about any concerns you have, but once you have made a treatment decision, try to follow it.
Arthritis Consumer Experts

Who we are

Arthritis Consumer Experts (ACE) provides research-based education, advocacy training, advocacy leadership and information to Canadians with arthritis. We help empower people living with all forms of arthritis to take control of their disease and to take action in health care and research decision making. ACE activities are guided by its members and led by people with arthritis, leading medical professionals and the ACE Advisory Board. To learn more about ACE, visit www.jointhealth.org

Guiding principles and acknowledgement

Guiding Principles
Health care is a human right. Those in health care, especially those who stand to gain from the ill health of others, have a moral responsibility to examine what they do, its long-term consequences and to ensure that all may benefit. The support of this should be shared by government, citizens, and non-profit and for-profit organizations. This is not only equitable, but is the best means to balance the influence of any specific constituency and a practical necessity. Any profit from our activities is re-invested in our core programs for Canadians with arthritis.

To completely insulate the agenda, the activities and the judgments of our organization from those of organizations supporting our work, we put forth our abiding principles:

- ACE only requests unrestricted grants from private and public organizations to support its core program.
- ACE employees do not receive equity interest or personal *in-kind* support of any kind from any health-related organization.
- ACE discloses all funding sources in all its activities.
- ACE identifies the source of all materials or documents used.
- ACE develops positions on health policy, products or services in collaboration with arthritis consumers, the academic community and health care providers and government free from concern or constraint of other organizations.
- ACE employees do not engage in any personal social activities with supporters.
- ACE does not promote any "brand", product or program on any of its materials or its web site, or during any of its educational programs or activities.

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