



## SUNNYBROOK LEADS INNOVATIVE EFFORTS IN PAIN CONTROL

### FOR IMMEDIATE RELEASE:

**TORONTO, February 23, 2009** –Discomfort after surgery is a normal part of the healing process for most patients. However, over 30 per cent of all patients suffer severe pain after surgery, which can lead to poor recovery and chronic pain. Uncontrolled pain can also potentially produce damaging effects on the heart and lungs.

Dr. Colin McCartney, an anesthesiologist at Sunnybrook’s Holland Orthopaedic & Arthritic Centre, leads a team of experts to promote the latest innovations in pain management with the goal of improving the post-operative experience and to help patients return to their daily activities sooner. Through a unique method called **preventive analgesia**, patients are given a combination of pain medications before surgery and continuing for several days after surgery in order to reduce the levels of pain they might typically experience.

“As the Director of Regional Anesthesia Research and Education at the Holland Centre, it is my responsibility to facilitate implementation of best practice and to investigate new and better ways of controlling post-operative pain,” says Dr. McCartney, who is also an associate professor at the University of Toronto. “Preventive analgesia (starting pain relieving medications prior to surgery) has been shown to reduce pain and drug-related side effects by decreasing pain signals from the surgical site. As a result, this technique has been shown to reduce the risk of developing acute and chronic pain after surgery.”



At the Holland Centre, pain management starts early; every patient is evaluated by an anesthesiologist in the pre-operative clinic about two weeks **before** surgery. At this time, aspects of anesthetic care are discussed in a calm environment where patients can properly evaluate the benefits and risks of the common approaches to pain relief. Nerve block techniques, common in the Holland Centre because of their superior pain relief, are often used instead of general anesthesia, and this is discussed in depth with the patient. The patient is then made aware of the preventive pain medication regime that they can expect to be prescribed when they are admitted to the hospital. Prolonged pain relief is provided by

applying a local anesthetic (pain reliever) around the nerves that supply the surgical site. This treatment is only stopped two to three days after surgery when the patient requires a less potent pain reliever.

A month prior to his total knee replacement surgery earlier this year, Richard Atkinson, 73, from Orillia, Ontario, began a regimen of extra strength Tylenol and ice to manage the sore knee. He consulted with his anesthesiologist three weeks prior to surgery, who provided an individualized assessment and encouraged Richard to continue his existing pain control regimen. On the day of

surgery, Richard clearly recalls being wheeled into an area separate from the operating room prior to surgery where he was administered analgesic medications and nerve block techniques.

“With each day, I am improving,” says Richard. “I didn’t need any Percocet (a pain reliever) after the first evening back at home, and that was just five days after surgery.”

Despite its clear benefits, preventive analgesic methods including nerve blocks are the exception rather than the rule in many hospitals. However, with other staff and scientists at the Holland Centre, Dr. McCartney is investigating how to promote a wider usage of preventive analgesia in medical organizations across Canada.

“Overall, there has been a change in practice for pain control, but since the infrastructure is different in every hospital, anesthesiologists may not have the time, the facilities or the experience to practice these techniques,” notes Dr. McCartney. “Changing people’s practices is also difficult. For example, physicians tend to be very conservative and are reluctant to make changes in practice until they study the evidence themselves to understand how it applies to their own patient population. Like most professionals, physicians often learn by personal experience and that includes what works well in their own practice.”

Fiona Webster, a knowledge translation scientist at Sunnybrook, is working with Dr. McCartney to understand the barriers and facilitators of best practices in pain management. “There are many reasons why doctors do not implement best practices,” Fiona says. “For example, the local context of delivering care, including issues of infrastructure and resources, may influence clinical decision-making. We will be studying these issues empirically in order to help us develop effective strategies that will support practice change both here at Sunnybrook and provincially.”

The Holland Orthopaedic & Arthritic Centre is one of the largest hip and knee joint replacement centres in Canada, performing more than 2,100 procedures each year. It is the first government-designated Hip and Knee Centre of Excellence in Canada and is an innovative leader in models of care and provider roles. It is also at the forefront of new surgical procedures such as minimally invasive hip and knee replacement surgery. These leading edge procedures mean less pain, faster recovery and a shorter hospital stay for patients.

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