Chronic knee osteoarthritis: Aiming at pain management

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ABSTRACT

Chronic knee osteoarthritis is the most common form of arthritis. It affects a large group of the population, especially the middle-aged and older. The etiologic management of the disease is not possible today, although efforts are made for the application of novel methods, such as the application of blastocytes. The local application of capsaicin is a novel method for pain management in chronic osteoarthritis. Lidocaine patches represent an alternative for pain management in knee osteoarthritis. The oral administration of diacerein is another approach, as it has been proved to diminish the production of inflammatory cytokines observed in chronic pain. The aim is to study the effect of the local application of capsaicin 8% and local application of lidocaine 5% and the oral administration of diacerein on pain in chronic knee osteoarthritis. Methods for the etiologic management of chronic osteoarthritis do not exist. Currently used treatment options such as non-steroidal anti-inflammatory drug (NSAID) administration are fraught with side effects. The application of novel methods with limited side effects for the management of pain is very important, as it may offer a therapeutic method for a problem affecting a large population group.

Keywords: osteoarthritis, pain, chronic pain, pain management.
INTRODUCTION
Chronic knee osteoarthritis is the most common form of arthritis. It affects a large group of the population, especially those of the middle age and older. The etiologic management of the disease is not possible today, although efforts are made for the application of novel methods, such as the application of blastocytes. Nowadays novel methods are being developed. The local application of capsaicin is a novel method for pain management in chronic osteoarthritis. The local application of lidocaine is an alternative novel method for pain management in knee osteoarthritis. The oral administration of diacerein is also a novel method for pain management in chronic osteoarthritis, as it has been proved that it diminishes the production of inflammatory cytokines observed in chronic pain.

AIM
The aim is to study the effect of the local application of capsaicin 8% and local application of lidocaine 5% and the oral administration of diacerein on pain in chronic knee osteoarthritis.

METHODS
Pain will be measured in 1) a group of 100 patients with chronic knee osteoarthritis before and after the local application of capsaicin 8%, 2) a group of 100 patients with chronic knee osteoarthritis before and after the local application of lidocaine 5%, and 3) a group of 100 patients with chronic knee osteoarthritis before and after the oral administration of diacerein. Pain will be measured with the DN4 questionnaire.

ANTICIPATED RESULTS
It is anticipated that pain improvement will be observed in chronic knee osteoarthritis 1) after the local application of capsaicin, 2) the local application of lidocaine, and 3) after the oral administration of diacerein. Chronic knee osteoarthritis is a common disease affecting a large group of the population, especially the middle-aged and older. Chronic knee osteoarthritis is a known complication of morbid obesity and metabolic syndrome; diseases which are a modern epidemic. Methods for the etiologic management of chronic osteoarthritis do not exist, although efforts are made for the application of novel methods, such as the application of blastocytes. Existing methods such as non-steroidal anti-inflammatory drug (NSAID) administration are fraught with side effects. The application of novel methods with limited side effects for the management of pain, a main symptom of the disease, is very important, as it may offer a therapeutic method for a problem facing a large population group.

CONFLICT OF INTEREST
The authors declare no conflict of interest.

REFERENCES