

# Managing acute dental pain emergencies.

## An interview with Professor Ken Hargreaves

### Introduction

Professor Hargreaves's area of research focuses on the pharmacology of pain and inflammation and the latest developments in NSAIDs, acetaminophen-containing analgesics and local anaesthetics and their application in acute dental emergencies. Every day dentists all over the world deal with patients in acute dental pain emergencies. Pain can be caused by numerous conditions such as abscess, irreversibly inflamed pulp, a fractured tooth and periapical disease, all of which require different treatment modalities to tackle the root of the problem often involving the prescription and administration of analgesics, anaesthetics and NSAIDs (Nonsteroidal anti-inflammatory drugs) to manage of pain. In the following short interview, Prof. Hargreaves gives us an indication of some of the topics and research he will be covering during his lectures at Idem Singapore 2014.

### What are the factors that can contribute or hinder proper management of acute dental pain emergencies?

**Prof Hargreaves:** Ideal pain control starts before you even see your patient. Developing a logical and efficient plan or algorithm before the dental emergency allows the clinician to be much more efficient when treating these patients and maximizes the results.

### How important is a proper diagnosis in determining the cause of pain?

**Prof Hargreaves:** Our pain control plan is called the "3D" approach, which consists of Diagnosis, Dental Treatment and Drugs. An accurate diagnosis is the first and essential step for treating the emergency dental pain patient.

### What else could be done to manage the pain when a proper diagnosis couldn't be reached other than referring the patient to a specialist?

**Prof Hargreaves:** Understanding mechanisms of dental pain and the role of central sensitization in referred pain will greatly reduce the number of cases where a pain diagnosis cannot be made. Using the latest evidence, the vast majority of acute pain emergencies can be rapidly diagnosed and treated.

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### How should NSAIDs, analgesics and anaesthetics be used, on their own and in combination with each other when managing pain?

**Prof Hargreaves:** Fortunately, there are an increasing number of clinical trials demonstrating the analgesic benefits as well as potential adverse effects of different analgesics and anaesthetics for treating dental pain emergencies. Using these studies, one can develop an efficient and logical approach for using these drugs either alone or in combinations capable of producing synergistic relief of acute pain. We will spend considerable time reviewing the conclusions from these studies and summarizing an evidence-based approach for managing pain.

### To what extent can dentists adjust the prescription and administration of NSAIDs, analgesics and anaesthetics to suit individual patients with different needs and thresholds?

**Prof Hargreaves:** Other than treating children, where dose ranges are highly developed, the primary factor in selecting drugs and their combinations is the level of pre-operative pain. The rationale for using pre-op pain as a decision point is based on the finding that pain before a dental procedure highly predicts pain after the procedure. Thus, the astute clinician can "adjust" their selection of post-treatment analgesics even before providing care to their patient.

### When using local anaesthetics, why is it important to use long-acting ones?

**Prof Hargreaves:** Long acting local anaesthetics help to reduce central sensitization and therefore can reduce pain for days after a single injection. I will be reviewing the rationale for this conclusion and giving tips on how (and when) to use long-acting local anaesthetics during my talks at IDEM Singapore 2014.

### What are the pros and cons of pre-treating patients with NSAIDs versus acetaminophen to delay the onset of post-operative pain?

**Prof Hargreaves:** New evidence is emerging on the benefits and potential adverse effects of these drugs when administered alone or in combination. The latest results will be distilled into clinical guidelines and discussed at IDEM Singapore 2014.

Thank you, Professor Hargreaves