

## Dental Pain Management

### **Dental Pain**

*Most people will suffer the unpleasant effects of dental pain or toothache during their lifetime. Every year nearly half of the population will experience some form of dental pain or discomfort and 25% will eventually be driven to seek emergency treatment. Severe dental pain can be totally incapacitating. Low grade, chronic dental pain is debilitating and in both cases the first priority must be to make an urgent dental appointment for diagnosis and treatment by a dentist. The early warning signs should never be ignored. It is easy to understand the reason for such unpleasant symptoms. The nature of the teeth and their association with the jaws are part of a complex sensory mechanism with short nerve pathways to the brain. Pain tells the brain that all is not well.*

### **Toothache**

The teeth and the tooth attachments may give rise to painful symptoms as a result of decay, abscess, gum (periodontal) disease or eruption problems. The pain may vary from: an intermittent or fleeting sensitivity; sensitivity to hot and cold that may indicate the early onset of decay; to the most dreadful acute throbbing pain caused by advanced decay and a dental abscess. In this latter case it may be impossible even to touch the teeth together and eating may be difficult.

### **Post-operative Pain**

Pain may occur following dental treatment. It is not uncommon after a very large and deep filling has been placed or a dental extraction carried out. The degree of pain is related to the damaged dental tissues [e.g. the surgical removal of an impacted wisdom tooth can be associated with several days of pain or discomfort]. Patients must therefore expect to be given suitable medication and advised to follow procedures aimed at promoting rapid healing whilst reducing the discomfort to a minimum. It is most unusual for post-operative pain to last for more than 10 days. In the vast majority of cases medication will not be required for more than 3 days.

### **Dental/Facial Pain**

There are other causes of dental pain that simulate toothache in people who otherwise may have good oral hygiene and excellent teeth [e.g. sinusitis can cause pain on one or both sides of the face]. Trigeminal (facial) neuralgia can bring stabbing pains that will cause serious incapacity. Deep-seated aches in the jaws may also indicate the presence of disease. Diagnosis may not be easy or certain. It is imperative to see a dentist who may have to refer to a consultant for further tests.

### **Dental Pain Control**

There are many factors that influence the choice of a successful regime for dental pain control. The young and the old require extra care together with those who may already be taking medication for other medical or dental conditions and pregnant or nursing mothers. The assessment of the physical and psychological make-up of the patient, together with their past experiences with various forms of pain control, are key to

future choices. Allergies, asthma, other contra-indications and short term personal or business activities may also have to be considered.

In the vast majority of emergencies dental pain can be controlled in the short term by one of three simple medicines – paracetamol, aspirin and ibuprofen. All can be purchased without the need for a prescription and are known as Over the Counter (OTC) medicines. Only a minority of dental cases will need access to more powerful Prescription Only Medicines (POM) that can only be supplied by a general medical or dental practitioner.

### **Paracetamol**

Effective in pain relief in a wide variety of situations that include headaches, muscular pain, neuralgia, influenza and dental pain, it also reduces raised body temperature. It has remarkably few side effects and is well tolerated in those situations in which aspirin has to be avoided, including in young children.

### **Aspirin**

A useful, safe, analgesic with blood-thinning properties. The fact that aspirin modifies the blood clotting mechanism has to be recognised as an unwelcome side effect for some patients and particularly those who suffer gastrointestinal problems. Aspirin must be avoided in those with peptic ulcers, pregnancy and also in some post-operative situations as it could delay healing. It should not be given to children under the age of twelve, to asthmatics or those with a tendency to allergic reactions. The old fashioned practice of placing an aspirin tablet beside a painful tooth can cause burns and bleeding of the gum and is to be discouraged.

### **Ibuprofen**

Like aspirin, it has anti-inflammatory properties and is effective in lowering a fever and relieving pain. It is useful in dental pain control as many dental conditions have an inflammatory element. It should not be used in situations that involve gastrointestinal problems, asthma or after surgery.

The use of paracetamol, aspirin, or ibuprofen may well be sufficient to bring pain relief, but other drugs may be even more effective. For example, the addition of opiates like codeine, either alone or combined with aspirin or paracetamol, will increase significantly the analgesic effects. The same effect occurs when codeine is added to ibuprofen. Caffeine is commonly added and may improve absorption and reduce drowsiness. Research suggests that there may be a benefit to be gained by alternating between aspirin/codeine or paracetamol/codeine combinations and ibuprofen every 3 hours. Some branded analgesics incorporate antihistamines such as diphenhydramine or doxylamine to improve pain-killing properties.

Manufacturer's instructions should be read carefully and it should be remembered that medication is only a short-term remedy and not a long-term cure for acute pain.