

# The diagnosis as a determinant in the Endodontic decision

DOI: <https://doi.org/10.14436/2358-2545.9.1.005-006.edt>

Pain referred to teeth, called odontogenic, is the most common orofacial pain, and its etiology often involves easily identifiable markers, such as caries, periodontitis, pulpitis and tooth trauma. The treatment of these painful conditions is directly associated with the resolution of these diseases and often includes invasive procedures, such as restorations, endodontic treatment or extractions. The elimination of etiologic factors will probably resolve pain, which is, in these cases, secondary, that is, a symptom of something “wrong” with teeth.

In contrast, patients may complain of an abnormal toothache affecting the dentoalveolar region, but not originating in any tooth. In these cases, the diagnosis becomes a great challenge for the dentist, even for the more experienced professionals. Treatments using invasive dental procedures are not the correct option for these conditions. This type of pain may be called primary, as the patient’s disease is the pain itself. Clinical dentists should be prepared to manage it effectively while avoiding any iatrogenic events, which may often result from the deeply rooted beliefs that all “toothache” is a symptom of something wrong with a tooth. In other words, the tooth is not always the “bad guy”. Here we should add that it has been historically believed that numerous ailments and pains may be resolved by tooth extractions.

These primary types of pain do not have an odontogenic origin. They form a group of conditions characterized by pain in the dentoalveolar structures and not caused by any tooth, pulp or periodontal anomaly. Although most patients that present with a toothache in the dental office have the origin of this pain explained by problems in dental or periodontal tissues, we should pay special attention to their condition and never underestimate the possibility of non-odontogenic pain. General dentists and Endodontists should be aware of the existence of the different types of pain and, if possible, be familiar with the diagnostic criteria for these painful conditions.

Primary pain often gives rise to insecurity, confusion and disbelief by general dentists. At the same time, it exposes the patient to large doses of suffering, distress, doubt and fear. When these factors come together, decision-making about treatment may often lead to iatrogenic events, which sometimes do not improve and may even worsen the patient’s painful clinical condition. Consequently, the number of extracted or endodontically treated teeth has been growing, even for cases when no dentoalveolar anomalies are clinically or radiographically evident.

**How to cite:** Bonjardim LR. The diagnosis as a determinant in the Endodontic decision. *Dental Press Endod.* 2019 Jan-Apr;9(1):5-6. DOI: <https://doi.org/10.14436/2358-2545.9.1.005-006.edt>

It is often difficult for dentists to avoid invasive procedures, because they are not specialists in orofacial pain and do not know the different sources, etiopathogeny and classification of pain. At the same time, patients may give their consent and insist fervently that any form of pain “IN” the tooth be eliminated, as many believe that tooth extraction or endodontic treatment will resolve the problem.

Therefore, clinical dentists should pay special attention to these painful conditions to avoid initiating any irreversible procedures that may compromise teeth, which are not the main cause of pain in these cases. Dentists should be prepared to establish the difference between “toothache” and pain that is only located “IN” the tooth.

The first tip is that the suffering patient – anxious, persistent and experiencing intense pain – should not interfere with the dentist’s decision making, particularly when this dentist is aware of the reasons to avoid any specific procedure, be it irreversible or not. We should never treat pain using a trial-and-error approach. Therefore, we have to give a name to the problem and make an accurate diagnosis according to globally accepted current criteria based on scientific evidence.

Another important point: it is fundamental that specialists in Endodontics should be familiar with the different conditions that cause orofacial pain and that, above all, they believe that other types of pain, even those that originate at a site distant from that tooth, may trigger the pain felt “IN” a certain tooth. Therefore, the knowledge about etiopathogeny and diagnostic classifications of orofacial pain is fundamental. Some of the most important types of pain that may affect the dentoalveolar region are: temporomandibular joint dysfunction, sinus pain, neuropathic pain - such as trigeminal neuralgia and postendodontic treatment pain or implant placement pain -, idiopathic pain, neurovascular pain and, believe it or not, even cardiac pain, which may be referred to the teeth.

Finally, while we are currently going through a technological revolution in Dentistry, characterized by the improvement of adhesive systems, implants, prosthetic materials, instrumentation and root canal irrigation, we are also gradually moving away from diagnosis and clinical reasoning. Unfortunately, patients often end up going on a long journey before they receive a correct diagnosis, and sometimes they undergo multiple unnecessary, potentially iatrogenic treatments. We should have professionals with a qualified formation, so that our patients receive proper dental care.

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