

## **Coffea cruda substantially reduces toothache in Root canal treatment without local anesthesia**

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### **Abstract**

**Background and objective:** Toothache is very common clinical condition seen in dental OPD in day to day practice. Treatment of toothache depends upon the cause and severity. Root canal therapy is one of the procedures used to treat the toothache. Use of local anesthesia during the procedure has several side effects. Local anesthetics are frequently administered in dentistry and thus can be expected to be a major source of drug-related complications in the dental office. Additionally, the dentist will more often be confronted with the treatment of risk patients; thus, the incidence of side effects can be expected to rise. Complications associated with the administration of the local anesthesia of all patients, 45.9% had at least one risk factor in their medical histories, with cardiovascular diseases and allergies being the most frequent. Additionally, doses of local anesthetics proved not to be strictly determined according to body weight, especially for patients weighing less than 50 kg.<sup>[1]</sup> To prevent these side effects of local anesthesia, homoeopathic medicines can be used to subside the pain during process of Root Canal Therapy (RCT). In this study, we tried Coffea cruda 30 a homoeopathic medicine in the cases of RCT to reduce pain.

**Materials and methods:** This Study was carried out in MHMC Dental OPD for 8 months. At this set up RCT without LA has been done in 3 sittings and before every sitting a follow-up for each case is taken.

**Result:** After giving Coffea cruda 30 to patient who suffered from toothache during and after RCT, pain reduced in terms of intensity recorded according to Numerical pain rating scale.<sup>[2]</sup> Mean pain reduced from 6.08 (32%) to 1.31(7%) at the end of third sitting of RCT procedure with Coffea cruda's intervention.

**Conclusion:** Coffea cruda is effective to reduce toothache in the process of root canal therapy done without local anesthesia.

**Keywords:** Toothache, Root canal therapy (RCT), Local Anesthesia (LA), Coffea cruda, Homoeopathy.

**Introduction:** A toothache is any pain or soreness within or around a tooth, indicating inflammation and possible infection.<sup>[3]</sup> Where a tooth is painful and dental pulp is irreversibly damaged, or a tooth is badly broken down, the patient is usually faced with a choice of extraction or saving a tooth. As more and more of our patients choose to save rather than extract their teeth, there is an increase in need for RCT.<sup>[4]</sup> Dental caries is the most common cause of pain in the teeth, the prevalence of toothache in a population depends on the rate of caries and the factors that influence that rate, such as diet, social class, and levels of fluoride in the water supply.<sup>[5]</sup>; 2010.

Acute dental pain was significantly more frequent (around 84%) than chronic pain (around 16%)<sup>[3]</sup> 92% of adults 20 to 64 have had dental caries in their permanent teeth.<sup>[6]</sup>

A root canal therapy is a treatment used to repair and save a tooth that is badly decayed and becomes infected. Root canal therapy seem to be painful but is the most successful procedure to save the tooth.<sup>[5]</sup>

Root canal treatment is a procedure that uses biologically acceptable chemical and mechanical treatment in the root canal system to eliminate pulpal and periradicular diseases and to promote healing and repair of periradicular tissues. Aim of root canal treatment is to preserve the functional teeth.<sup>[4]</sup> Use of local anesthesia during the procedure leads to several side effects like haematoma, unable to blink eyelids, rising of heart beat, paraesthesia etc.

Many therapeutic options to the management of anxiety in dental phobia; anesthesia, conscious sedation, combined with a soothing cabinet, a caring dentist, targeted use of medications or milder alternative methods; homeopathy, herbal medicine, accupuncture, psychotherapy, places the patient's interests at the center of the care giving relationship. So some patients may be sent or processed in collaboration with other health professionals.<sup>[7]</sup> So this research is carried to see effectiveness of Homoeopathic medicine used during the Process of RCT without LA so as to prevent side effects of local anesthesia, Dental health care professionals are facing challenges in managing acute or chronic dental conditions due to failure in regression of symptoms or side effects of traditional treatment regimens.<sup>[8]</sup> So as to bridge the gap of pain relief with Coffea cruda during RCT we used Numerical pain scale for recording intensity of pain. Indications considered to prescribe Coffea cruda for toothache were: indescribable pain, stinging pain, intermittent pain, sensitiveness of tooth with restlessness. Toothache aggravated by cold exposure; hot drinks; night; chewing. Toothache ameliorated by holding ice cold water in mouth.

Definition: Pain- an unpleasant sensory or emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

**Objective:**

To study the efficacy of Coffea cruda to reduce toothache in the process of root canal treatment done without local anesthesia.

**Materials and methods:** This case series study was carried out in total 86 numbers of subjects suffered from toothache that had done RCT. The required consent of the patients was obtained from patient himself. Study was carried out in MHMC Dental OPD for 8 months. Root canal therapy requires at least 3 sittings to complete the procedure and before each sitting a follow-up for each case has been taken. Coffea cruda is one of the significant medicines in acute clinical condition to reduce the pain. Indications of Coffea for toothache are Violent throbbing toothache; run about crying and complain of insupportable pain, though they confess that sometimes the pain is not so intense, yet they are affected very much; they behave like persons distracted.

Coffea cruda should be tried when the pain is frantic, intermittent, jerking and stinging. The patient is relieved for a time being by holding cold water in the mouth, but the pain returns when the water becomes warm. Sleeplessness due to toothache calls for Coffea Cruda<sup>[9-12]</sup>

Coffea cruda 30, one dose in thirty number globules, five such wet medicated globules as single dose is administered before every sitting of RCT.

Inclusion criteria:

- 1) Subject suffering from acute dental pain related to pulpitis, caries, sensitivity, root exposure, etc.
- 2) Both male and females who suffers from toothache. Subjects with earlier incomplete root canal treatment can be included.

Exclusion criteria:

- 1) Subjects who suffered from oral cancer, cardiac disorders, psychiatric disorders, bleeding disorders, paralysis or oral sub mucus fibrosis.
- 2) Fractured tooth structure due to caries which are advised for extraction.
- 3) Extreme periodontal and gingival disorder.
- 4) Children with deciduous dentition.

**Result:** A total of 100 patients were studied in MHMC Dental OPD. In all patients who participated in study 44 were male and 56 were female. 56% of female as to 44% male observed in the age group from 11 to 70 years. Highest number of frequency that is 27 found in the age group from 31 to 40 years which appears to be 32.81%.

Clinical conditions observed during the study were irreversible pulpitis (deep caries), periapical lesion, exposed pulp (mechanical or traumatic) and non vital pulp.

The mean pain score Observed with Numerical pain Rating Scale (NRS) before RCT 6.08 (32%) reduced in terms of intensity to 1.31(7%) which seems to be highly significant.

#### **Discussion and conclusion:**

Root canal treatment is a procedure that uses biologically acceptable chemical and mechanical treatment in the root canal system to eliminate pulpal and peri radicular diseases and to promote healing and repair of periradicular tissues.

Every anesthetic agent has some or the other side effects. We are well aware of utility and Indications of homoeopathic medicines before and after surgical interventions. We have reflected significant role of homoeopathy not only before and after but also during surgical intervention with Coffea Cruda so as to minimize the pain during RCT.

The patient visited MHMC OPD for toothache of an average duration of 13.9 days with indication for RCT. Without local anesthesia root canal therapy has been done in 3 sittings, so we took 3 follow-ups for each case. Before commencement of RCT procedure at every sitting, a dose of Coffea cruda 30 in thirty number globules was given. All three sittings for RCT were carried out from 3 to 5 days. Pain before the start of treatment as well as before every RCT sitting is monitored. And then the procedure was carried out. The intensity of pain observed during every sitting before the RCT has been assessed with Numerical pain rating scale which reduced from 5.9 to 1.4 which is significant in itself. Patient has well tolerated whole procedure without Local anesthesia

So we found Coffea cruda relieves the toothache before, during and after surgical intervention effectively. It is very clear from the study that toothache needing surgical intervention can be successfully managed with Homoeopathy.

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