



Prevalence of Pain Post Endodontic Therapy

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Abstract:

Aim and objective : To determine the prevalence of persistent pain post endodontic treatment.

Background : Endodontic treatment or root canal treatment is done when decay has already reached the pulp. Endodontic therapy involves removal of the pulp with subsequent shaping, cleaning, and disinfection of the root canal space and the obturation of the root canal with the inert filling material. Post operatively, after endodontic treatment, the patient may have sensitivity pertaining to the tooth that has been treated due to natural tissue inflammation. Post operative pain is a normal phenomena. However, if it lasts for more than few days it should be considered.

Key words : Pain, endodontic treatment, prevalence, post-operative pain.

INTRODUCTION :

Root canal treatment (RCT) or endodontic treatment is a common procedure in dentistry.[1] Root canal procedures are commonly believed to be the most painful dental treatment, but only 17% of subjects experiencing root canal treatment described it as their most painful dental experience.[2]

The development of postoperative pain after RCT is usually due to acute inflammatory response in the periradicular tissues. It commences within few hours or days after endodontic treatment. It is a poor indicator of pathosis and unreliable predictor of long-term success.[3]

The development of pain is more dependent on the intensity of tissue damage, and the outcome of RCT is influenced by the persistence of the source of injury.[4]

The basic principles of RCT are the eradication of root canal irritant, obturation of the root canal system, and preservation of the natural dentition. The procedure can be done in single visit or multiple visits .[5]

Anticipation and experience of root canal associated pain is a major source of fear for patients and a very important concern for dentists. Pretreatment, treatment, and posttreatment pain is anticipated, experienced, remembered, and shared by patients. [6]

Knowledge about the causes of postoperative pain and adoption of appropriate preventive measures can significantly reduce the incidence of this highly distressing and undesirable clinical phenomenon .[7]

METHODOLOGY :

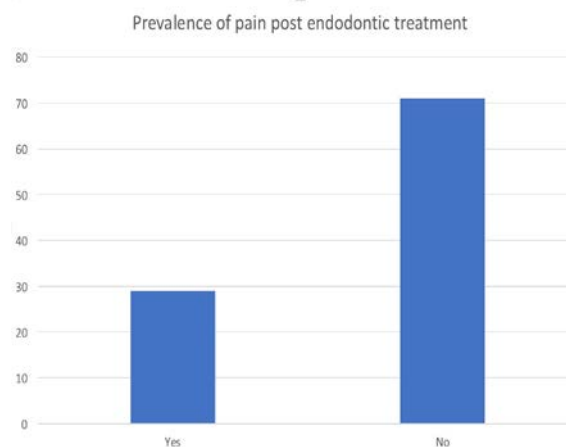
In this study, a sample size of 100 patients attending the Saveetha Dental College after their endodontic treatment were taken into consideration irrespective of their gender and age.

These patients were given a well-constructed questionnaire. The questions were formulated to find out the pain prevalence and severity estimations and allow the comparison of pretreatment and post treatment pain in patients who received root canal therapy. Eventually, the data collected from the survey will be used to analyse and evaluate the prevalence of pain post the endodontic treatment.

RESULTS :

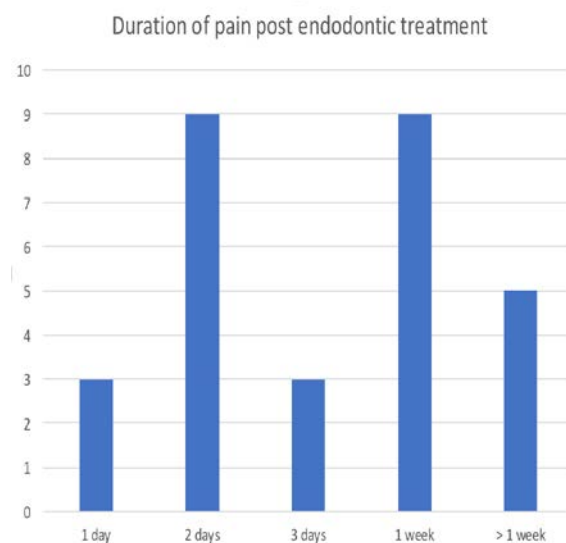
From the obtained data, the pain prevalence post the endodontic treatment in patients were analysed and plotted in a graph.

GRAPH 1 : [PAIN PREVALANCE POST ENDODONTIC THERAPY]



In the above graph, the blue column represents the pain prevalence after the endodontic treatment. Out of 100 patients, 71 patients experienced no pain while 29 patients experienced pain post the endodontic treatment.

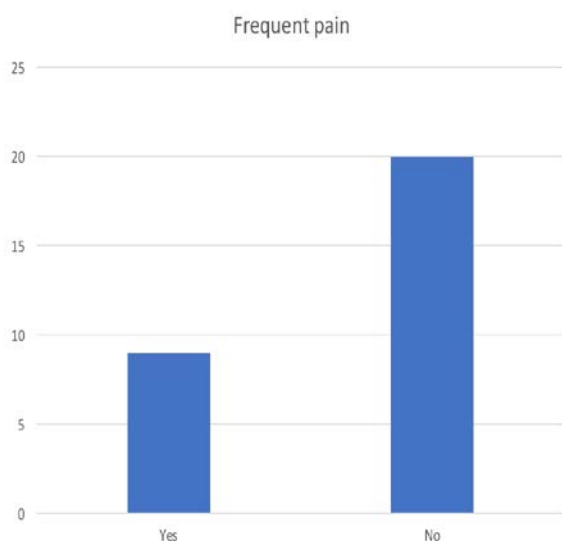
GRAPH 2 : [Duration of pain post endodontic treatment]



In the above graph, the blue column represents the duration of pain experienced by the patients after the endodontic treatment. Out of 29 patients who experienced pain after the endodontic therapy, it

is seen that only 3 patients experienced pain for 1 day,9 patients for 2 days,3 patients for 3 days,9 patients for a week, 5 patients for more than a week and then the pain gradually decreased.

GRAPH 3: [NATURE OF THE PAIN/FREQUENCY OF PAIN]



The above graph shows that out of 29 patients who experienced pain after endodontic treatment,9 patients got frequent pain while for others,it wasn't frequent.

DISCUSSION :

Root canal treatment (RCT) or endodontic treatment is a common procedure in dentistry.[1] The development of postoperative pain after RCT is usually due to acute inflammatory response in the periradicular tissues.[3]

The etiologic factors in pain manifestation have not been determined precisely; however, several hypothetical mechanical, chemical, and/or microbial injuries to the pulp or the periradicular tissues might be involved. The development of pain is more dependent on the intensity of tissue damage, and the outcome of RCT is influenced by the persistence of the source of injury .[4]

Patients might consider postoperative pain and flare-up as a benchmark against which the clinician's skills are measured. It might undermine patients' confidence in their dentists or patient satisfaction with the treatment.[4]

Tooth pain causes suffering and reduced functioning and is a major component of oral health and quality of life .Pain is often the motivation for an individual seeking dental care, while for some patients the fear and anxiety associated with dental pain prevents them from requesting needed care.Acute post-surgical

pain is known to cause functional changes in the nervous system.[8]

The prevalence and severity of pain have been reported to rapidly decrease to 10% or less 7 days after endodontic therapy , but several studies report that a small percentage of patients experience persistent pain months to years after root canal therapy .[9]

Persistent pain is known to occur and has many possible explanations, including an untreated or incompletely obturated canal, failed coronal seal, tooth fracture, pain associated with an adjacent tooth, referred pain from a non- odontogenic structure, or deafferentation pain.[10]

CONCLUSION :

Although persistent pain is an important outcome in dentistry, its frequency, severity, and extent of interference with daily life has not been well characterized in dental care populations.

The main purpose of this study is to determine the pain experienced by patients post the root canal treatment and to obtain the results.

Henceforth,this study has been undertaken and the results were obtained.

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