

## Case Report

# Supernaturalism and oral health: a case report

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## ABSTRACT

Superstitious beliefs have frequently been observed among patients in our daily procedures. A belief that is not supported by scientific information is considered superstitious. Superstition is frequently used by traditional healers to treat human health issues and diseases, which puts them at odds with the medical community's use of evidence-based treatment methods. Dental and medical experts agree that this type of practice is risky since it is carried out by unskilled individuals using unsterilized devices in unclean settings. Certain customs that go against the advice of conventional medical professionals are harmful to the public's health. Depending on the sort of practice used, they may have an impact on the affected population's oral and overall health. Treating oral health requires thorough knowledge of oral cavity and any home remedies cannot cure it. This case report highlights a case of such misconception in treating tooth pain at home, which resulted in a tragedy that reported to the department of oral medicine diagnosis and radiology of Sree Balaji dental college and hospital.

**Keywords:** Superstition, Home remedy, Oral health, Kandankathiri seeds, Herbal smoke

## INTRODUCTION

Indian civilization is influenced and dominated by innumerable superstitious beliefs since time immemorial. Various types of magical practices, beliefs have been part of our lives since generations. Since health is a major entity or factor governing our social well-being, it is also not left untouched by such superstitious beliefs. Apart from the social and financial factors, that affected medical interventions there was again plethora of magical myths and superstitious practices that influenced medical treatment.<sup>1</sup>

People had their own set of beliefs and practices regarding disease or health.<sup>2</sup> These practices or beliefs were also followed for oral health and disease. Since ancient period, the human face, oral cavity and dentition are subject of interest and intrigue for mankind and

therefore are part of many habits, norms, customs, traditions and taboos. Various taboos and beliefs exist since long and continue to do so even now.<sup>3</sup> These are considered as negative practices and traditions which are not good or fruitful for social wellbeing.<sup>4</sup>

In modern world with increasing emphasis on education and the resultant evolution of more reasonable approach, gradually such practices are declining, but are not completely eradicated from society. Many superstitious beliefs and practices are still reported and encountered. Dentistry is also not spared from such beliefs.<sup>5</sup>

Myths or superstitious beliefs are considered as stories by a group of people, which are part of their cultural identity. They have a strong influence in the life of individuals and on their way of living including seeking treatment during illness.<sup>6</sup>

Various myths related to dental treatment such as “professional cleaning causes loosening of teeth and extraction of upper teeth leads to loss of vision” were significantly observed in uneducated females. This kind of misconception is inherited due to false exaggerated information promulgated by those who had previous personal negative dental experiences.<sup>7</sup>

## CASE REPORT

In this paper, we present a case of a 13-year-old boy who reported to the department of oral medicine and radiology, with chief complaints of pain in lower right back tooth region for the past 3 days. History revealed that the pain is severe, continuous, dull in nature which aggravates on mastication and relieved at rest. Pain did not subside upon medication. Patient underwent root canal treatment before 1 year. Patient has no systemic illness. Patient brushes his teeth once daily using toothbrush and toothpaste.

On enquiry patient first said a false history of fall, burn due to accidental fire from matchstick. On further probing, patient confessed that his father performed a procedure (ingestion of herbal smoke) for the purpose of removal of worm from a caries tooth. And he further added that patient's grandfather had been regularly doing this remedy for many people facilitating removal of tooth worms.

The procedure which was done by patient's father was that of placing a small piece of iron rod that was heated to red hot by placing in hot coal, which was placed in centre of plate that contains water in it. Two open-ended stainless-steel container is placed with one end on the plate. Then kandankathiri seeds (*Solanum xanthocarpum*) and Neem oil was added to it, and the other end was kept into the patient's mouth. The time taken to complete this procedure was 10 minutes. They believed that the tooth worms would have been collected in the water as a result of smoke produced by mixture of neem oil and Kandan kathiri seed that was burnt using hot iron rod (but in this case he had not noticed any such thing).

As a result of this procedure patient developed burns in parts of eye, malar area, ala of nose, lips due to intense back fire when the procedure was done.

On extra oral examination brownish black crustations were seen in relation to upper and lower lip (Figure 1), left malar region (Figure 2), left eye lid (Figure 3), right and left ala of nose (Figure 4).

On intraoral examination the right lower posterior tooth was tender on percussion (Figure 5). The periodontium, alveolar, labial, buccal, palatal mucosa, tongue, floor of the mouth appeared to be normal. Intra oral radiograph in relation to tooth no. 46 revealed dental caries with pulpal involvement. The case was diagnosed as a case of extra

oral burn with chronic irreversible pulpitis in relation to dental caries 46.

Patient was referred to department of conservative dentistry and endodontics for further opinion and management.



**Figure 1: Brownish crustation of lips.**



**Figure 2: Brownish crustation in left malar area.**



**Figure 3: Crustation in left upper eye lid.**



**Figure 4: Crustation in ala of nose.**



**Figure 5: Grossly decayed 16.**

## DISCUSSION

People still believe in superstitions all around the world. Superstitions are overwhelming in some cultures but limited in others-even though they still do exist.<sup>8</sup>

### *Legend of worm theory*

The concept of a tooth-worm, which according to popular belief, caused caries and periodontitis, has existed in diverse cultures and across the ages. The theory of the tooth-worm was assigned by medical doctors almost exclusively to superstition. Even so, the idea that toothache was caused by gnawing worms held on even into this century. There were many different ideas with regard to the appearance of tooth-worms.<sup>9</sup>

In England, for instance, it was thought that the tooth-worm looked like an eel. In Northern Germany, people supposed the tooth-worm to be red, blue, and gray and in many cases the worm was compared to a maggot. The gnawing worm was held responsible for many evils and,

in particular, was blamed for toothache provoked by caries. It was supposed that the disease was caused by small worms' resident within the tooth, eating it away. This theory was disproved in 19<sup>th</sup> century, when bacteria was discovered to be the true cause.<sup>10</sup>

The patient's father probably relied on this theory and followed this procedure as a home remedy to treat his child. This purely is an ill effect of dental negligence and lack of knowledge about the cause for dental decay. The adverse effects can be acute lung damage, intra oral and gastrointestinal ulcers, cancer, nausea, heart disease due to the smoke inhaled. This case report could deepen the understanding of the superstitious belief about oral health.

## CONCLUSION

To conclude Oral Health providers, need to play an active role in spreading knowledge and educate people on various issues. More work should be done to create awareness. Knowledge and awareness are necessary prerequisites for changes in behavior including behavior related to health disease and prevention. An effective approach by which this issue can be addressed to the community is only by understandable oral health promotion activities towards the consequence of these unethical practices.

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