

# Cannabis use and oral diseases

## Abstracted from

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Effect of cannabis usage on the oral environment: a review.

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## Questions: What is the effect of cannabis usage on the oral environment?

**Data sources** Medline and the Cochrane Central register of controlled trails (CENTRAL).

**Study selection** Randomised Controlled Trials, Controlled Clinical Trials and Cohort Studies conducted on humans investigating cannabis usage were included. Screening was performed independently by two reviewers. Only English language studies were included. Case reports, letters and historical reviews were excluded.

**Data extraction and synthesis** A narrative synthesis was conducted.

**Results** Seven studies were included and a range of cannabis-associated oral side effects identified.

**Conclusions** Based on the limited data, it seems justified to conclude that with increasing prevalence of cannabis use, oral health care providers should be aware of cannabis-associated oral side effects such as xerostomia, leukoedema and an increased prevalence and density of *Candida albicans*.

## Commentary

The purpose of this review was to attempt to identify oral side effects that may be associated with the use of cannabis and to raise an important question, as more patients are using cannabinoids daily for medical purposes.

The legal use of cannabis in all of the varied situations is very controversial despite the knowledge that cannabis may have some beneficial effect in the treatment of the following: spasticity associated with multiple sclerosis;<sup>1</sup> neuropathic pain associated with nerve injury as in diabetes;<sup>2</sup> human immunodeficiency virus; herpes zoster infection and cancer.<sup>3</sup>

The use of cannabis is associated with generally mild side effects such as dry mouth, dizziness, somnolence and nausea.

Nonetheless, cannabis is associated with a variety of adverse effects, among which is psychosis. There is a valid concern over the therapeutic use of cannabinoids by adolescents and individuals who are predisposed to psychosis.<sup>4</sup>

Regardless of the side effects, the use of cannabis has been accepted worldwide. However, disagreement over its use prevails and the topic is relevant for many practitioners.

The well-organised review searched two databases in English language only without additional search. The selected studies appeared very different on the basis of design and the outcomes evaluated. There was no quality assessment performed to establish risk of bias or any further evaluation of potential confounding factors.

The results were presented in a narrative style divided according to oral findings.

The limited data that reported increased caries and the occurrence of gingivitis seen among the patients indicates a combination of factors such as lifestyle and dry mouth could be involved. The effect on salivary function appears to decrease over time, possibly related to tolerance which develops during long term use.

Cannabis users demonstrated an increased prevalence of *Candida albicans* as compared to tobacco smokers. This can be explained by a direct effect of the drug but by the lifestyle issues as well. The 2009 review<sup>5</sup> did not demonstrate any association between cannabis use and oral cancer. Leukoedema appears to be more prevalent among cannabis users without any additional clinical relevance.

Despite the limited quality of the evidence gathered and that the side effects are not specific to cannabis only, it is still important for clinicians to be able to recognize the possible side effects so that patients can be guided properly.

## Practice points

- Daily use of cannabinoids may induce some oral manifestations of dental diseases. Clinicians are encouraged to look for such side effects.

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