Journal of Odontology

OPEN ACCESS Freely available online

Commentary

Fluoride's Involvement in Avoiding Tooth Decay and Boosting Oral Health

Lauren Willis*

Department of Oral Health & Development, University Dental Hospital of Manchester, Manchester, England

DESCRIPTION

Dental fluorosis is a dental condition caused by overexposure to fluoride during the development of teeth. It is characterized by changes in the appearance of teeth, including discoloration and pitting. While fluoride is essential for preventing tooth decay, excessive exposure to it can lead to this condition.

Causes

Dental fluorosis occurs when the body is exposed to high levels of fluoride during the formation of teeth. This typically occurs in childhood, between the ages of 6 months and 14 years. During this time, the teeth are still developing and are therefore more susceptible to the effects of fluoride. The most common sources of fluoride exposure include:

Drinking water: Fluoride is often added to drinking water to help prevent tooth decay. However, in some areas, the levels of fluoride in the water can be too high, leading to dental fluorosis.

Toothpaste: Most toothpaste contains fluoride, which can be beneficial for preventing tooth decay. However, children who swallow toothpaste or use too much of it can be exposed to excessive amounts of fluoride.

Mouthwash: Some types of mouthwash also contain fluoride, which can contribute to dental fluorosis if used excessively.

Supplements: Fluoride supplements are sometimes prescribed to children who live in areas with low levels of fluoride in the water. However, if these supplements are not taken as directed, they can lead to dental fluorosis.

Symptoms

The symptoms of dental fluorosis can vary depending on the severity of the condition. In mild cases, there may be slight discoloration of the teeth, such as white spots or streaks. In more severe cases, the teeth may be brown or black and may have pits or other irregularities. Other symptoms of dental fluorosis may include:

Sensitivity: The teeth may become more sensitive to hot and cold temperatures.

Enamel erosion: Over time, the enamel on the teeth may become weakened and may wear away, making the teeth more susceptible to decay.

Chalky appearance: The teeth may have a chalky appearance and may feel rough to the touch.

Changes in tooth shape: In severe cases, the teeth may become misshapen or may have other irregularities.

Prevention of dental fluorosis

The best way to prevent dental fluorosis is to limit exposure to fluoride during the development of teeth. This can be done by:

Using the right amount of toothpaste: Children should use only a pea-sized amount of toothpaste and should be supervised to ensure that they do not swallow it.

Using fluoride-free water: If they are living in an area with high levels of fluoride in the water, consider using a water filtration system that removes fluoride.

Avoiding excessive use of mouthwash: If people use mouthwash that contains fluoride, be sure to follow the instructions carefully and avoid using more than the recommended amount.

Fluoride supplement instructions: If the child has been prescribed fluoride supplements, make sure to follow the instructions carefully and do not give them more than recommended.

Getting regular dental check-ups: Regular dental check-ups can help detect early signs of dental fluorosis and other dental conditions, allowing for prompt treatment.

Dental fluorosis is a dental condition caused by overexposure to fluoride during the development of teeth. While fluoride is essential for preventing tooth decay, excessive exposure to it can lead to this condition. The symptoms of dental fluorosis can vary depending on the severity of the condition and may include discoloration, sensitivity, enamel erosion, and changes in tooth shape. Treatment options for dental fluorosis may include tooth whitening, bonding, or the use of crowns or veneers, depending on the severity of the condition. To prevent dental fluorosis, it is important to limit exposure to fluoride during the development of teeth, such as by using the right amount of toothpaste, using fluoride-free water, avoiding excessive use of mouthwash, following fluoride supplement instructions, and getting regular dental check-ups.

Correspondence to: Lauren Willis, Department of Oral Health & Development, University Dental Hospital of Manchester, Manchester, England, E-mail:lauren@gmail.com

Received: 27-Feb-2023, Manuscript No. JOY-23-22783; **Editor assigned:** 02-Mar-2023, PreQC No: JOY-23-22783 (PQ); **Reviewed:** 17-Mar-2023, QC No: JOY-23-22783; **Revised:** 24-Mar-2023, Manuscript No: JOY-23-22783 (R); **Published:** 31-Mar-2023, DOI: 10.35248/JOY.23.7.653

Citation: Willis L (2023) Fluoride's Involvement in Avoiding Tooth Decay and Boosting Oral Health. J Odontol. 07: 653