

Prevention of Dental Caries in Children

Hamse Igge

I did this Project Dental Village with Dr. Robin Jones DDS
Presentation in Fall SAMURS 2022, University of Washington Tacoma



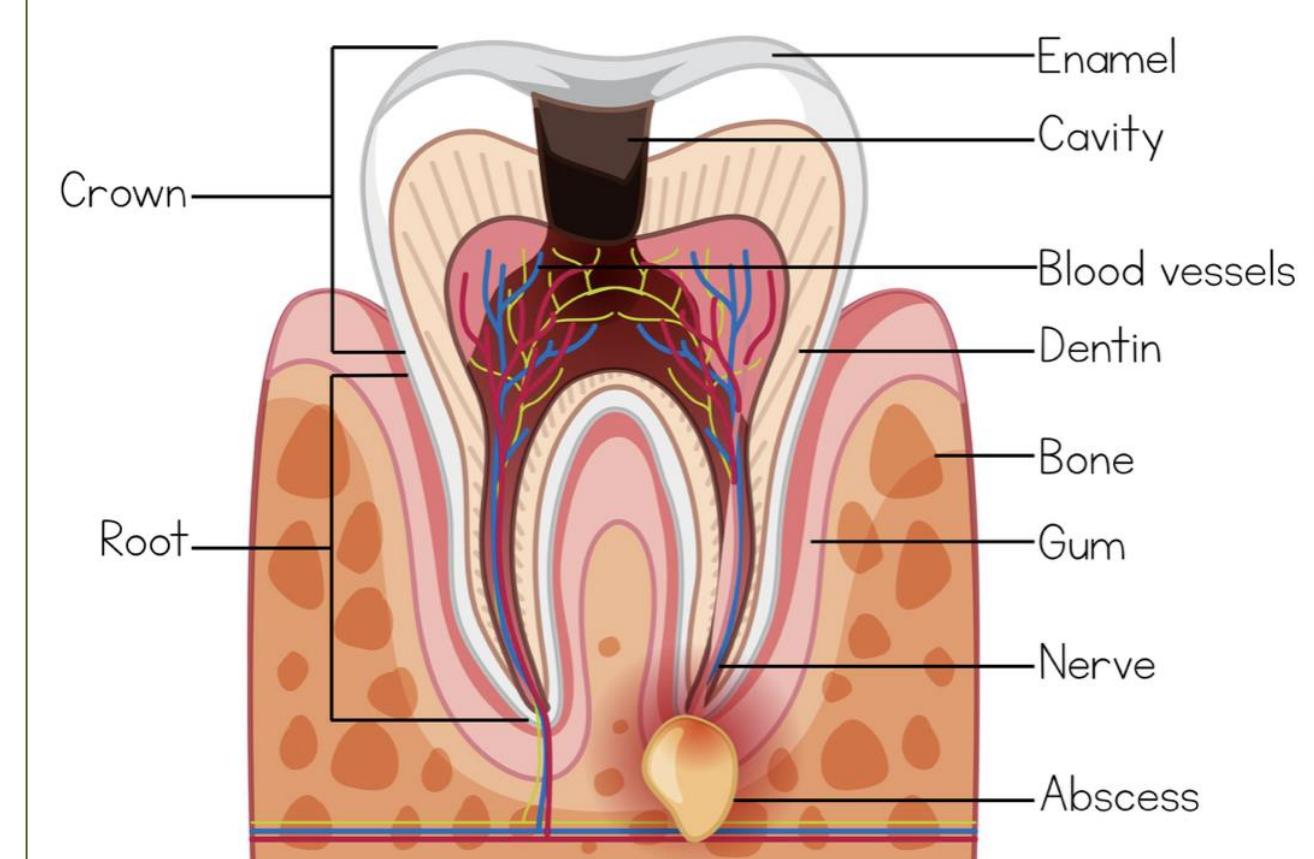
Abstract

Dental caries is damage to the teeth caused by bacteria living in our mouth. Symptoms of Dental Caries include toothache, sensitivity, sharp pain in the teeth, visible holes or pits, and brown or black stains on the teeth. In Children, it can be prevented by frequent brushing with fluoride toothpaste, a well-balanced diet, and by regular dental cleanings and exams. It can be treated by Fluoride treatment, fillings, crowns, root canal and Tooth extraction.

Introduction

- Dental caries (or tooth decay) is the damage to the teeth, caused by decay-causing bacteria in the mouth
- Bacterial Fermentation of dietary carbohydrates release acids, which destroy tooth surface or Enamel
- It leads to a small hole in the tooth, called cavity
- If left untreated, it may lead to pain, infection, and even tooth-loss

Cavity and abscess in a tooth



- Young children are at a risk of “early childhood caries”, also known as baby bottle tooth decay, that cause severe tooth decay in baby teeth.

Causes of Dental Caries

- Dental Caries or tooth decay is the leading health problem
- They are especially common in children, teenagers, and some adults
- Caused by a combination of factors like **bacteria in the mouth, frequent snacking, sipping sugary drinks, and not clean the teeth well.**

STAGES OF TOOTH CARIES



Signs and Symptoms

- Signs and Symptoms of Caries vary, depending upon its extent and location
- As the decay progresses, following signs and symptoms may appear:
 - **Toothache, spontaneous pain or pain that occurs without any apparent cause**
 - **Tooth sensitivity**
 - **Mild to sharp pain when eating or drinking something sweet, hot or cold**
 - **Visible holes or pits in your teeth**
 - **Brown, black or white staining on any surface of a tooth**
 - **Pain when you bite down**

How To Prevent Caries in Children

- Start brushing your child’s teeth with a fluoride toothpaste as soon as they appear in the mouth
- Children under 3 years should use toothpaste about the size of rice grain.
- Children older than 3 years old should use toothpaste about the size of a pea.

- After age 2, Floss your teeth daily
- Eat a well-balanced diet. Limit snacks that are sticky and high in sugar, like chips, candies, cookies, cakes, etc.,
- Prevent bacterial transfer between different people by NOT sharing eating utensils.
- Use fluorinated water in taps. Otherwise, use fluoride supplements according to the dentist’s advice.
- Have dental cleanings and exams every six months



Treatment of Dental Caries

If Dental caries appear in children, they can be treated by:

- **Fluoride treatment:** It may restore the tooth enamel at initial stages of cavity.
- **Fillings:** at later stage of tooth decay, fillings or restorations are the best option
- **Crowns:** for extensive decay or weakened teeth, a custom fitted covering is put on the damages enamel
- **Root Canal:** when decay reaches the pulp of teeth, it is replaced with a filling
- **Tooth Extraction:** when teeth are severely decayed and can’t be restores, they are extracted.

Literature Cited

- Featherstone, J. D. (2000). The science and practice of caries prevention. The Journal of the American dental association, 131(7), 887-899.
- Marinho, V. C., Higgins, J., Logan, S., & Sheiham, A. (2003). Fluoride toothpastes for preventing dental caries in children and adolescents. Cochrane database of systematic reviews, (1).
- Peres, M. A., Latorre, M. D. R. D. O., Sheiham, A., Peres, K. G., Barros, F. C., Hernandez, P. G., ... & Victora, C. G. (2005). Social and biological early life influences on severity of dental caries in children aged 6 years. Community Dentistry and Oral Epidemiology, 33(1), 53-63.