

Tooth loss

From Wikipedia, the free encyclopedia

Tooth loss is a process in which one or more teeth come loose and fall out. Tooth loss is normal for deciduous teeth (baby teeth), when they are replaced by a person's adult teeth. Otherwise, losing teeth is undesirable and is the result of injury or disease, such as dental avulsion, tooth decay, and gum disease. The condition of being toothless or missing one or more teeth is called *edentulism*.



A young boy after losing two baby teeth, exfoliated in response to the permanent teeth beneath, which will erupt through the gums to take their place.

Contents

- 1 In children
- 2 Causes and prevention
 - 2.1 Secondary to disease
- 3 Missing tooth replacement
- 4 Research
- 5 See also
- 6 References
- 7 External links

In children

Tooth loss typically begins around age six and continues until age twelve. The upper and lower central incisors are shed at age six to seven years. The upper and lower lateral incisors are shed at seven to eight years. The upper canines are shed at ten to twelve years. The lower canines are shed at nine to twelve years. The upper and lower first molars are shed at nine to eleven years. The upper and lower second molars are shed at ten to twelve years.^[1]

Causes and prevention

As a person ages, their permanent teeth have been exposed to normal mechanical forces, such as chewing, and also more abnormal mechanical forces, such as bruxism (grinding) and traumatic injury. Permanent teeth may also be affected by oral disease.^[2] There are many ways in which a person may protect his or her permanent teeth from loss.

The main method of preventing tooth loss is prevention of oral diseases. Tooth loss can be due to tooth decay and gum disease. Tooth decay is caused by increased plaque retention. Bacteria can then invade the plaque and cause dental caries (cavities). If cavities persist untreated for an extended period of time,

tooth breakdown occurs.^[3] Plaque retention and bacterial presence also affect the gums and bone and their ability to hold the teeth in place. Disease of the gums, known as periodontitis, leads to detachment of the supporting structures from the teeth and their eventual loss. Tooth loss due to tooth decay and gum disease may be prevented by practicing good oral hygiene, and regular check-ups at a dentist's office. Good oral hygiene consists of brushing two times a day with a fluoridated toothpaste and flossing. Dental check-ups should occur every six months. Children or adults who are incapable of caring for their own teeth should be assisted with oral hygiene in order to prevent tooth loss.^[4]

In contact sports, risk of mouth trauma and tooth injury is reduced by wearing mouthguards and helmets with a facemask (e.g., a football helmet, a goalie mask).

Nightguards may also be implemented in the case of teeth grinding (bruxism) during sleep. These guards function in limiting the wear and force applied to the teeth. In turn, this minimizes the chance of loss.

In countries such as the United States, Japan, Germany, and Italy, there is a strong relationship between cigarette smoking and tooth loss. Studies have shown that an increase in exposure to cigarette smoking can increase the risk of tooth loss. In addition, studies have also found that when people stop smoking, there is a decrease in tooth loss.^[5]

Proper nutrition has been shown to prevent tooth loss by providing the nutrients necessary to maintain enamel strength.^[6]

Tooth loss occurs more often in people from the lower end of the socioeconomic scale.^[7]

Secondary to disease

Tooth loss can occur secondary or concomitantly to many diseases. Diseases may cause periodontal disease or bone loss to prompt tooth loss. Consequently, periodontal disease may cause increased infection, which may predispose a person to other diseases. Diseases commonly related to tooth loss include, but are not limited to: cardiovascular disease,^[8] cancer,^[9] osteoporosis^[10] and diabetes mellitus.^[11] Therefore, it is important to not only maintain good oral hygiene, but also overall good health.

Missing tooth replacement

Maximum preservation and protection of natural teeth is best for eating and chewing; however, there are three basic ways to replace a missing tooth or teeth, including a fixed dental bridge, dentures, and dental implants. Each alternative has its own benefits and drawbacks. It is important to consider a patient's medical, financial, and emotional situation. It is recommended that a patient experiencing tooth loss visits a dentist to discuss which replacement method is best suited for his or her situation. It has been shown that a non-removable replacement, such as a bridge or implant appears to provide patients with the best sense of security and well-being.^[12]

Research

Researchers in Japan have successfully regrown fully functional teeth in mice. Epithelial and mesenchymal cells were extracted from the mice, cultured to produce a tooth "germ", and the germ was then implanted into the bone at the space of a missing tooth. A tooth of the correct external and internal structure, hardness, strength, and sensitivity later erupted in the space, eventually meeting the opposing tooth in a manner similar to an original natural tooth. This technique may be a possible future treatment for replacement of missing teeth.^[13]

See also

- Teeth cleaning
 - Tooth brushing
 - Flossing
 - Tongue Cleaning
- Dental surgery
- Wisdom tooth
- Dental Implant
- Periodontist

References

1. "Tooth Eruption: The primary teeth". *Mouth healthy.org*. American Dental Association. Retrieved 2 June 2014.
2. Baelum V, Luan W-M, Chen X, Fejerskov O (1997). "Predictors of tooth loss over 10 years in adult and elderly Chinese". *Community Dent Oral Epidemiol*. **25**.
3. Burt BA, Ismail AI, Morrison EC, Beltran ED (May 1990). "Risk factors for tooth loss over a 28-year period". *J Dent Res*. **69** (5): 1126–30. doi:10.1177/00220345900690050201. PMID 2335645.
4. Li; et al. (2011). "Age, period and cohort analysis of regular dental care behavior and edentulism: a marginal approach.". *BMC Oral Health*. **11** (9).
5. Hanioka, T., Ojima, M., Tanaka, K., Matsuo, K., Sato, F., and Tanaka H. (2011). "Causal assessment of smoking and tooth loss:a systematic review of observational studies". *BMC Public Health*. **11**: 221. doi:10.1186/1471-2458-11-221.
6. Ioannidou, E; et al. (Nov 11, 2013). "Tooth Loss Strongly Associates with Malnutrition in Chronic Kidney Disease". *J Periodontol*. **85** (7): 899–907. doi:10.1902/jop.2013.130347. PMID 24215204.
7. *Social inequalities in oral health: from evidence to action* (PDF). 2015. p. 9. ISBN 9780952737766.
8. Desvarieux, M; et al. (Sep 2003). "Oral Infections and Vascular Disease Epidemiology Study (INVEST). Relationship between periodontal disease, tooth loss, and carotid artery plaque". *Stroke*. **34** (9): 2120–5. doi:10.1161/01.STR.0000085086.50957.22. PMC 2677013 . PMID 12893951.
9. Meyer, MS; et al. (Nov 2008). "A review of the relationship between tooth loss, periodontal disease, and cancer.". *Cancer Causes Control*. **19** (9): 895–907. doi:10.1007/s10552-008-9163-4. PMC 2723958 . PMID 18478344.
10. Anil, S; et al. (Nov 2013). "Impacto of Osteoporosis and its treatment on oral health". *Am J Med Sci*. **5** (346): 396–401. doi:10.1097/MAJ.0b013e31828983da. PMID 23588259.
11. Sima C, Glogauer M (Jun 2013). "Diabetes mellitus and periodontal diseases". *Curr Diab Rep*. **13** (3): 445–452. doi:10.1007/s11892-013-0367-y. PMID 23430581.
12. Zarb, George A (June 1988). "The Replacement of Missing Teeth". *Can Fam Physician*. **34** (34): 1435–1440. PMC 2219122 . PMID 21253206.
13. [1] (<http://www.pnas.org/content/early/2009/07/31/0902944106.full.pdf>)Etsuko Ikeda; Ritsuko Morita; Kazuhisa Nakao; Kentaro Ishida; Takashi Nakamura; Teruko Takano-Yamamoto; Miho Ogawa; Mitsumasa Mizuno; Shohei Kasugai & Takashi Tsuji (2009). "Fully functional bioengineered tooth replacement as an

organ replacement therapy". *Proceedings of the National Academy of Sciences of the United States of America*. **106** (32): 13475–80. doi:10.1073/pnas.0902944106. PMC 2720406  PMID 19666587.

External links

- Avulsed tooth: What to do (<http://ncemi.org/cse/cse0413.htm>)
- Tooth injury (<http://www.guardkit.com/en/toothinjury.asp>)

Retrieved from "https://en.wikipedia.org/w/index.php?title=Tooth_loss&oldid=739478804"

Categories: Acquired tooth pathology

- This page was last modified on 14 September 2016, at 23:06.
- Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.