



A research on oral cavity problem

Aniket Vilas Kumbhar¹, Shivtej Jitendra Palange¹, Navnath Dhondiram Madne¹, Ananda Bhimrao Waghmode²

¹ Department of B. Pharmacy, Mandesh Institute of Pharmaceutical Science and Research center Mhaswad, Maharashtra, India

² Department of Pharmaceutics, Mandesh Institute of Pharmaceutical Science and Research center Mhaswad, Maharashtra
India

Abstract

The oral cavity is an area of the human body that is often given only cursory surveillance by primary care physicians. Dental problems are never any fun, but the good news is that most of them can be easily prevented. Brushing twice a day, flossing daily, eating properly and regular dental check-ups are essential steps in preventing dental problems. The consumption of different types of foods may lead to oral diseases. Bad breath, oral cancer, cavities and gum problems are some of the common oral problems that affect oral cavity. Other problems like genetic factors and ageing may also influence oral health. The excessive consumption of fried, spicy food, alcohol, smoking and drugs may lead to oral problems. Many people suffer from oral health problems that make them unable to sit with people. When the conditions become worse, they start avoiding interaction with people and feel disappointed. Although regular brushing and flossing reduce down these problems but sometimes serious problems take place that forces you to consult a cosmetic dentist.

Keywords: cavity problem, dental problems, primary care physicians

Introduction

Dental problems are never any fun, but the good news is that most of them can be easily prevented. Brushing twice a day, flossing daily, eating properly and regular dental check-ups are essential steps in preventing dental problems. Educating yourself about common dental problems and their causes can also go a long way in prevention. Here is a list of common dental problems: Bad breath, Gum disease, Tooth sensitivity, Tooth discoloration or yellow teeth, Wisdom teeth, Cavity, Oral cancer, Tooth ache. Bad breath is an unpleasant odor generated by the mouth. It is caused due to poor oral hygiene or remained food particles or gum disease. Bad breath, medically called halitosis, can result from poor dental health habits and may be a sign of other health problems.

Bad breath can also be made worse by the types of foods you eat and other unhealthy lifestyle habits. Bad breath is a common problem that can affect anyone at any age. Gum disease means infection occurs at the surrounding gums of teeth. Visiting a dentist biannual will cleans the plaque formation around the teeth. Gum disease is an inflammation of the gum line that can progress to affect the bone that surrounds and supports your teeth.

Tooth discoloration causes drinks like coffee and red wine causes tooth discoloration. Strawberry peel and baking soda will helps you lot for removing the tooth stains. Otherwise, teeth whitening at dentist are the best option. Tooth discoloration (also termed tooth staining) is abnormal tooth color, hue or translucency. External discoloration is accumulation of stains on the tooth surface. These are the third molars. Generally they come out at the age of 17-25. But they will harm the adjacent tooth while growing. So professional suggest remove them is the best option to get relief from the pain.

Structure of oral cavity

The oral cavity represents the first part of the digestive tube. Its primary function is to serve as the entrance of the alimentary tract and to initiate the digestive process by

salivation and propulsion of the alimentary bolus into the pharynx. It also serves as a secondary respiratory conduit, a site of sound modification for the production of speech, and a chemosensory organ.

The mobility of the lips is also critical to speech production, whistling, singing, the playing of wind and brass musical instruments, expectoration, and human behavioral communication (eg, kissing, smiling, pouting, baring of teeth). Even minor disruptions in the function of the oral cavity can seriously jeopardize an individual's quality of life.

The oral cavity includes the lips, gingivae, retromolar trigone, teeth, hard palate, cheek mucosa, mobile tongue, and floor of the mouth. The major salivary glands are in close relation with oral cavity structures, although they are not part of the oral cavity. The tongue is part of the oral cavity; The palatine tonsils, soft palate, tongue base, and posterior pharyngeal walls are part of the oropharynx; the oropharynx is not part of the oral cavity.

Different diseases in oral cavity

- Bad breath
- Gum disease
- Tooth sensitivity
- Tooth discoloration or yellow teeth
- Wisdom teeth
- Cavity
- Oral cancer
- Toothache

Bad breath

Bad breath is an unpleasant odor generated by the mouth. It is caused due to poor oral hygiene or remained food particles or gum disease. Bad breath, medically called halitosis, can result from poor dental health habits and may be a sign of other health problems. Bad breath can also be made worse by the types of foods you eat and other unhealthy lifestyle habits. Bad breath is a common problem that can affect anyone at any age.

Causes

There are a number of things that can cause bad breath. It's usually the result of poor oral hygiene. If bacteria build up in your mouth, the toxins produced can cause your breath to smell. Bacteria break down pieces of food in the mouth, and may release an unpleasant-smelling gas. Any food trapped on your teeth – particularly between them – is broken down by bacteria, which may cause bad breath. Persistent bad breath can sometimes be a sign of gum disease. Eating strongly flavoured foods, such as onions and garlic, can also cause your breath to smell, as can smoking and drinking alcohol. Occasionally, bad breath can occur after an infection or illness, or as a result of taking certain types of medication.

Treatment

Taking proper oral care by using techniques like brushing, flossing and eating food and fruits that are rich in vitamin C kills bacteria that cause bad breath. Improving your oral hygiene is usually enough to cure bad breath and stop it happening again.

To improve your oral health, make sure you

- floss between your teeth daily
- brush your teeth and gums regularly
- clean your tongue regularly

Gum disease

Generally bad habits like smoking or chewing tobacco and even genetic disorders causes gum disease. Gum disease means infection occurs at the surrounding gums of teeth. Visiting a dentist biannual will cleans the plaque formation around the teeth. Gum disease is an inflammation of the gum line that can progress to affect the bone that surrounds and supports your teeth. The three stages of gum disease from least to most severe are gingivitis, periodontitis and advanced periodontitis.

Cause

Bacteria in plaque, a sticky, colorless film that constantly forms on your teeth, cause gum disease. If plaque is not removed it can harden and turn into tartar (calculus). Additionally, dental plaque will continue to form on the tartar. Brushing or flossing cannot remove tartar; a dental professional will need to conduct a dental cleaning to remove it. Improper brushing

Treatment

There are a variety of treatments for gum disease depending on the stage of disease, how you may have responded to earlier treatments, and your overall health. Treatments range from nonsurgical therapies that control bacterial growth to surgery to restore supportive tissues. The best way to treat gum disease is to practice good oral hygiene, although additional dental and medical treatments are sometimes necessary.

Oral hygiene

Good oral hygiene involves

- brushing your teeth for about two minutes last thing at night before you go to bed and on one other occasion everyday – it doesn't matter if you use an electric or manual toothbrush but some people find it easier to clean their teeth thoroughly with an electric toothbrush
- using toothpaste that contains the right amount of fluoride (a natural mineral that helps protect against tooth decay)

- flossing your teeth regularly – preferably daily, before brushing your teeth
- not smoking
- regularly visiting your dentist – at least once every one to two years, but more frequently if necessary

Dental treatments

Some of the dental treatments described below may also be recommended if you have gum disease.

Scale and polish

To remove plaque and tartar (hardened plaque) that can build up on your teeth, your dentist may suggest that you have your teeth scaled and polished. This is a "professional clean" usually carried out at your dental surgery by a dental hygienist. The dental hygienist will scrape away plaque and tartar from your teeth using special instruments, then polish your teeth to remove marks or stains. If a lot of plaque or tartar has built up, you may need to have more than one scale and polish. The price of a scale and polish can vary depending on what needs to be carried out, so ask your dental hygienist how much it will cost beforehand.

Root planning

In some cases of gum disease, root planing (debridement) may be required. This is a deep clean under the gums that gets rid of bacteria from the roots of your teeth. Before having the treatment, you may need to have a local anesthetic (painkilling medication) to numb the area. You may experience some pain and discomfort for up to 48 hours after having root planing.

Tooth sensitivity

While eating or drinking extreme hot or cold people feel tooth sensitivity. The acid formation after eating meal can tends to tooth erosion. If you are feeling then sensitive toothpaste will be solution for getting relief from this.



Fig 1: Tooth sensitivity

Causes

The grim truth is that our teeth are mega-sensitive to pretty much everything-not brushing enough, brushing too hard, acidic foods, sweet foods, sour foods, dirty teeth, recently cleaned teeth, teeth-grinding, hard candies-which is why good dental care is so critically important. The consensus has been reached long ago: the cheapest, quickest, most painless treatment for tooth sensitivity is prevention.

Treatment

- Use a very soft bristle tooth brush, with low abrasive tooth paste
- Brush correctly and do not over brush
- Use a tooth paste specially formulated to soothe the nerve endings in the tooth
- Use a high concentration fluoride toothpaste (given to you by the dental professional) to strengthen the tooth surface

Tooth discoloration or yellow teeth

Generally drinks like coffee and red wine causes tooth discoloration. Strawberry peel and baking soda will help you a lot for removing the tooth stains. Otherwise teeth whitening at dentist are the best option. Tooth discoloration (also termed tooth staining) is abnormal tooth color, hue or translucency. External discoloration is accumulation of stains on the tooth surface. Internal discoloration is due to absorption of pigment particles into tooth structure. Sometimes there are several different co-existent factors responsible for discoloration.



Fig 2: Tooth discoloration or yellow teeth

Causes

There are several causes of tooth discoloration, including

- Foods/drinks. Coffee, tea, colas, wines, and certain fruits and vegetables (for example, apples and potatoes) can stain your teeth.
- Tobacco use. Smoking or chewing tobacco can stain teeth.
- Poor dental hygiene. Inadequate brushing, flossing, and rinsing with an antiseptic mouthwash to remove plaque and stain-producing substances like coffee and tobacco can cause tooth discoloration.

Treatment

- By making a few simple lifestyle changes, you may be able to prevent teeth discoloration. For example, if you are a Foods/drinks. Coffee, tea, colas, wines, and certain fruits and vegetables (for example, apples and potatoes) can stain your teeth.
- Tobacco use. Smoking or chewing tobacco can stain teeth. consider cutting back or quitting all together. Also, improve your dental hygiene by brushing, flossing, and using a mouthwash daily, and getting your teeth cleaned by a dental hygienist every 6 months.

Treatment of discoloration and may include

- Using proper tooth brushing and flossing techniques
- Avoidance of the foods and beverages that cause stains
- Bondings
- Veneers
- Using over-the-counter whitening agents
- In-home whitening agents purchased from your dentist
- In-office whitening procedures

Wisdom teeth

These are the third molars. Generally they come out at the age of 17-25. But they will harm the adjacent tooth while growing. So professional suggest remove them is the best option to get relief from the pain. This article is about the anatomy of wisdom teeth. For wisdom teeth removal surgery, see impacted wisdom teeth. For the upcoming Hong Kong film, see Wisdom Tooth (film).A wisdom tooth or third molar is one of the three molars per quadrant of the human dentition.



Fig 3: Wisdom teeth

Causes

Wisdom teeth normally push their way through the gums when a person is between the ages of 17 and 21. The sensation of a tooth pushing through the gums can be painful. In addition, there is often no room for the wisdom teeth in a person's mouth, as the adult teeth have already developed. This lack of space may cause wisdom teeth to come through at an angle, or getting stuck and not come through fully.

When this happens, the wisdom teeth are impacted. Having impacted wisdom teeth leaves the gums vulnerable, as the surface breaks and the teeth are not fully through. Food and bacteria can get trapped in the gums and lead to several issues, including

- gum disease
- infections
- abscesses
- cysts

Treatment

When a person's wisdom teeth are coming through, there are practical things they can do to make it less likely that their gums become infected. These actions include:

- Practicing good oral hygiene: Brushing teeth twice a day, flossing, and using mouthwash can help reduce the bacteria in the mouth that cause infections.
- Drinking plenty of water: This helps to flush food and bacteria away from the teeth and gums.
- Avoid sugary foods: Sweet foods can get stuck inside the broken gums, encouraging bacteria to grow.

Cavity

Many bacteria live in our mouth. If they combine with the food particles and saliva the formation plaque takes place. The plaque attacks the enamel layer and cavity forms. Once cavity forms the dentist will fix it by using crowns, filling or root canal. The information is given by Dentist Ontario. A cavity also called tooth decay is a hole that forms in your tooth. Cavities start small and gradually become bigger when they're left untreated. Because many cavities don't cause pain in the beginning, it can be hard to realize that a problem exists. Regular dental appointments can detect tooth decay early.

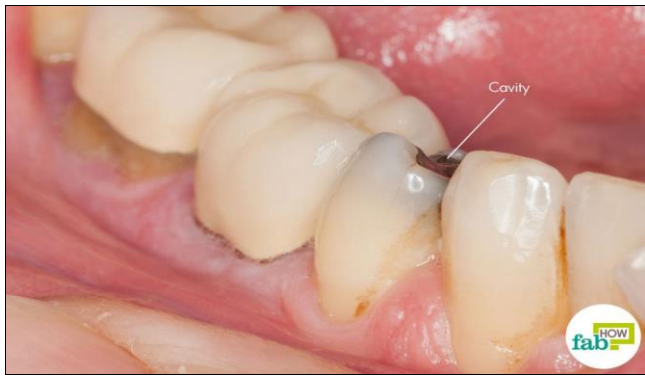


Fig 4: cavity

Causes of tooth cavities

Tooth cavities are caused by plaque, a sticky substance that binds to teeth. Plaque is a combination of

- bacteria
- saliva
- acid
- food particles

Everyone has bacteria in their mouth. After eating or drinking foods with sugar, bacteria in your mouth turn sugar into acid. Plaque starts forming on your teeth soon after eating or drinking anything sugary. This is why regular brushing is important.

Everyone is at risk for cavities, but some people have a higher risk. Risk factors include:

- too many sugary or acidic foods and drinks
- a poor oral hygiene routine, such as failing to brush or floss daily
- not getting enough fluoride
- dry mouth
- eating disorders, such as anorexia and bulimia
- acid reflux disease, which can result in stomach acid wearing down your tooth enamel

Cavities develop more often in the back teeth, according to the Mayo Clinic. These teeth have grooves and openings that can trap food particles. Also, these teeth are sometimes harder to reach when brushing and flossing.

Treatment

Tell your doctor about uncomfortable symptoms like tooth sensitivity or pain. Your dentist can identify tooth decay after an oral exam. However, some cavities aren't visible from an oral exam. So your dentist may use a dental X-ray to look for decay.

Preventing tooth cavities

Tooth cavities are a common dental problem, but you can reduce your risk by doing the following

- Brush your teeth at least twice per day with a fluoride toothpaste.
- Floss at least once daily, as recommended by the American Dental Association.
- Eat fewer sugary and acidic foods, like sweets, candy, juice, soda, and refined carbohydrates.
- Limit snacking between meals.
- Consider getting dental sealants on your teeth.

The following foods can help fight tooth decay

- fiber-rich fruits and vegetables
- calcium-rich foods
- xylitol sugarless chewing gum
- unsweetened black or green tea
- water with fluoride

Oral cancer

Mouth cancer, or oral cancer, can occur anywhere in the mouth, on the surface of the tongue, the lips, inside the cheek, in the gums, in the roof and floor of the mouth, in the tonsils, and in the salivary glands. Cancer is defined as the uncontrollable growth of cells that invade and cause damage to surrounding tissue. Oral cancer appears as a growth or sore in the mouth that does not go away. Oral cancer, which includes cancers of the lips, tongue, cheeks, floor of the mouth, hard and soft palate, sinuses, and pharynx (throat), can be life threatening if not diagnosed and treated early.

Causes

- Smoking. Cigarette, cigar, or pipe smokers are six times more likely than nonsmokers to develop oral cancers.
- Smokeless tobacco users. Users of dip, snuff, or chewing tobacco products are 50 times more likely to develop cancers of the cheek, gums, and lining of the lips.
- Excessive consumption of alcohol. Oral cancers are about six times more common in drinkers than in nondrinkers.
- Family history of cancer.
- Excessive sun exposure, especially at a young age.
- Human papillomavirus (HPV). Certain HPV strains are etiologic risk factors for Oropharyngeal Squamous Cell Carcinoma (OSCC)

Treatment

Treatment depends on the location and stage of the cancer, and the patient's general health and personal preferences. A combination of treatments may be necessary.

Surgery

Surgical removal of the tumor involves taking out the tumor and a margin of healthy tissue around it. A small tumor will require minor surgery, but for larger tumors, surgery may involve removing some of the tongue or the jawbone. If the cancer has spread to the lymph nodes in the neck, the cancerous lymph nodes and related tissue in the neck will be surgically removed.

If surgery significantly changes the appearance of the face, or the patient's ability to talk, eat, or both, reconstructive surgery may be necessary. This involves using transplanted grafts of skin, muscle, or bone from other parts of the body. Dental implants may be needed.

Radiation therapy

Oral cancers are especially sensitive to radiation therapy, which uses beams of high-energy X-rays or radiation particles to damage the DNA inside the tumor cells, destroying their ability to reproduce. External beam radiation delivers radiation from outside, while in brachytherapy, radioactive seeds and wires can be placed near the cancer inside the body.

Adverse effects of radiation therapy in the mouth include

- tooth decay
- mouth sores
- bleeding gums
- jaw stiffness
- fatigue
- skin reactions, as with a burn

Toothache

A toothache is a pain in or around a tooth that may be caused by

- Tooth decay
- Abscessed tooth
- Tooth fracture
- A damaged filling
- Repetitive motions, such as chewing gum or grinding teeth
- Infected gums
- Symptoms of a toothache may include:
 - Tooth pain that may be sharp, throbbing, or constant. In some people, pain results only when pressure is applied to the tooth.
 - Swelling around the tooth
 - Fever or headache
 - Foul-tasting drainage from the infected tooth

Causes of toothache

As well as tooth decay, toothache may be caused by:

- Tooth abscess
- Tooth fracture
- A damaged filling
- Repetitive movements, such as chewing gum or grinding teeth
- Infected gums

Treatments

Treatment for a toothache depends on the cause. If a cavity is causing the toothache, your dentist will fill the cavity or possibly extract the tooth, if necessary. A root canal might be needed if the cause of the toothache is determined to be an infection of the tooth's nerve. Bacteria that have worked their way into the inner aspects of the tooth cause such an infection. An antibiotic may be prescribed if there is fever or swelling of the jaw. Since most toothaches are the result of tooth decay, following good oral hygiene practices can prevent toothaches.

References

1. Scully C, Welbury R, Flaitz C, de Almeida OP. Color atlas of orofacial health and disease in children and adolescents: diagnosis and management. CRC Press, 2001.
2. Federation WD. The challenge of oral disease: a call for global action: the oral health atlas [Internet]. Btighton: Word Dental Federation,2015. [cited 2017 Mar 03].
3. Rautemaa R, Ramage G. Oral candidosis—clinical challenges of a biofilm disease. Critical reviews in microbiology,2011;37(4):328-336.
4. Scully C. Oral and Maxillofacial Medicine-E-Book: The Basis of Diagnosis and Treatment. Elsevier Health Sciences, 2012.
5. Research, Science and Therapy Committee of the American Academy of Periodontology. Position paper: periodontal diseases of children and adolescents. Journal of periodontology,2003;74(11):1696-1704.