

BAD BREATH

Causes of bad breath ?

Bad breath is a common health problem which greatly affects the daytoday activities of somany people. The offenssive odor from the mouth is unpleasent to those who come in close contact with bad breathers. The problem will be doubled by psychological trauma leading to depression. The sufferers from this problem will be isolated from the society. This can even lead to marital disharmony.

Literally speaking all humanbeings are badbreathres. Oral cavity contains millions of anaerobic bacteria like fusobacterium and actinomyces which acts on the protein of food materials and putrifies them. This process results in the formation of offenssive gases like hydrogen sulphide,methyl mescaptan,cadaverin,skatol,putrescine ect causing bad odor. If oral hygiene is not maintained properly all will suffer from bad breath. Most of us control this by regular brushing,tongue cleaning and gargling. Even after maintining cleanliness in the mouth some individuals suffer from offenssive smell due to various causes which has to be diagnosed and treated properly.

Some common causes of bad breath.

1) Poor oral hygiene:

If oral hygiene is not maintained properly the mouth becomes the seat for millions of bacteria which produce offenssive gases by degrading the food debris. Bad breath is severe in those who do not brush their teeth regularly and clean their mouth after every food. Snacks taken inbetween meals can also produce bad breath because of improper cleaning.

Badbreath is common in almost all people in the morning on waking. During sleep there is less production of saliva .Saliva has got some antibacterial properties which help to keep the mouth clean. Saliva conains oxygen molecules which is needed to make oral cavity aerobic. So the reduction in it's quantity during sleep makes a favourable condition for anaerobic bacteria.

2) Food habits:

The main cause of bad smell is due to degradation of protein by the bacteria and hence all food products rich in protein favours bad breath. Meat,fish,milk products, eggs,cakes,nuts,pear and ect can cause bad breath. Some food articles can produce particular type of smell which may be unpleasent. Raw onion can produce typical bad smell. It is said that an apple a day keeps the doctor away,a raw onion a day keeps everybody away. Eating groundnuts can also produce

bad smell. However if proper cleaning is done smell can be reduced irrespective of the nature of food. Irregularity in timing of food can also produce bad breath. Small food articles taken in between the meals can also produce bad smell.

3) Biofilm:

There is formation of a thin sticky coating called biofilm on the tongue and oral mucosa. This coating is thick on the posterior aspect of the tongue where millions of gram negative bacteriae are seen .The thick coating on the tongue is always associated with badbreath. Even a thin biofilm can make anaerobic condition favourable for bacterial proliferation.

4) Dental caries:

This is a destructive process causing decalcification with distruction of enamel and dentine resulting in cavitisation of the tooth. These are produced mainly by the lactobacilli . Food particles are deposited inside these cavities and are putrified by the anaerobic bacteria producing bad smell. Normal brushing will not remove the food debris easily and hence they are putrified completely. Caries are common in schoolgoing children and in those who donot maintain proper oral hygiene .Calcium and vitamin deficiency can also predispose caries.

5) Gingivitis:

Gum is a mucus membrane with supporting connective tissue covering the tooth bearing borders of the jaw .The main function of gum is protection .Gingivitis is the inflammation of the gum .Due to various causes gum tissue get infected resulting in swelling,pain and discharge. If the condition become worse the infection spread towards peridontal area leading to continuous discharge called pyorrhoea. Some times the infection goes deep producing alveolar abscess with discharge of pus. Infection can even reach the bone causing osteomyelitis.All these conditions can produce offenssive smell.

6) Gum retraction:

When the gums retract from the teeth a gap is developed which will lodge food particles and cause bad breath.

7) Dental plaques and tartar deposits; Plaques and tartar is deposited mainly in the gaps between the teeth and gum. This will provide shelter for the food debris and bacteria causing bad breath.

8) Ulcerative lesions& coatings:

Almost all ulcerative lesions of the mouth are associated with bad breath. These lesions may be caused by bacteria, viruses, food allergies or due to autoimmune disorders. Aphthous ulcer is the commonest among ulcerative lesions. Others are herpes, fungal infections, Vincent's angina, infectious mononucleosis, scarlet fever, diphtheria, drug reactions and etc. Cancerous ulcers produce severe bad breath. All fungal infections produce white coating (candidiasis). Leucoplakia is a white thick patch on the mucous membrane of the mouth & tongue. It is considered as a precancerous condition. Offensive breath is associated with these conditions.

9) Diseases of the salivary glands:

Saliva is very useful to supply oxygen to all parts of the oral cavity. Even a thin film of coating called biofilm can provide an anaerobic condition in the mouth. Saliva can wet these layers and make an aerobic condition which is unfavourable for the bacteria. Any condition which reduces the production of saliva can increase bacterial activity. Some times the salivary duct is obstructed by stones or tumors. Cancer of the salivary gland is associated with offensive odor. In suppurative parotitis purulent discharge into the mouth causes bad breath.

10) Tonsillitis:

Tonsils are a pair of lymphoid tissue situated in the lateral wall of oropharynx. Inflammation of the tonsil is called tonsillitis. Bad breath is seen in both acute and chronic tonsillitis. Quinsy or peritonsillar abscess can also produce bad breath.

11) Tonsillar plaques & tonsillar fluid:

If bad breath persists even after maintaining proper oral hygiene there is possibility of this condition. Serous fluid secreted from the folds of tonsil is very offensive. Some patients complain that they hawk some cheesy materials from the throat; which are very offensive in nature. These are formed inside the tonsillar crypts which contain thousands of bacteriae. In such conditions tonsillectomy gives noticeable relief from bad breath.

12) Pharyngitis & pharyngeal abscess:

Pharynx is a fibromuscular tube which forms the upper part of the digestive & respiratory tract. Inflammation of the pharynx is called pharyngitis, caused mainly by bacteria and viruses. Bad breath is present in pharyngitis along with

other signs like cough and throat irritation. Abscesses in the wall of pharynx can also produce offensive discharge of pus in to the throat.

13) Dentures:

Denture users may complain about bad smell due to lodgement of small food debris in between. Proper brushing may not be possible in denture users especially fixed dentures.

14) Tobacco:

Tobacco chewing is associated with bad breath. The smell of tobacco itself is unpleasant for others. Tobacco can irritate the mucus membrane and cause ulcers and coatings. Gingivitis and pyorrhoea are common in tobacco chewers. Tartar is deposited on the teeth mainly near the gums. Tobacco chewers get gastric acidity with eructations. All these causes offensive smell.

15) Smoking:

Smokers always have bad smell. It can also produce lesions in the mouth & lungs causing bad breath. Smoking increases carbon dioxide in the oral cavity & reduces oxygen level, causing a favourable condition for bacteria. Smoking reduces appetite & thirst hence acid peptic disease is common in chain smokers.

16) Lesions in the nose & ear:

Bad breath is occasionally seen in sinusitis (infection of para nasal sinuses). In case of post nasal dripping bad breath is common due to the presence of protein in the discharges. These proteins are degraded by the bacteria. Infection in the middle ear with discharge of pus in to the throat through the eustachian tube (passage from middle ear to the throat) can also cause offensive odor. Chronic rhinitis (infection of mucus membrane of nose) and foreign bodies in the nose can also produce bad smell in the expired air.

17) Diabetes mellitus:

Mostly all diabetic patients suffer from bad breath. Coated tongue, ulcers & coatings in the mouth, increased sugar level in tissues etc are responsible for bad breath. Bacterial growth in diabetic patient is very faster than non diabetic individuals.

18) Fevers:

Bad breath is common in almost all fevers. Even an acute fever can produce bad

breath. Severe bad breath is seen in typhoid .Other infectious diseases like Tuberculosis , AIDS ect produce bad smell.

19) Fasting & dehydration:

Dry mouth favours bacterial activity. So any condition which produce dryness in the mouth makes the breath offenssive. Eventhough the food particles are known to produce bad breath, fasting can also produce the same. Production of saliva is also reduced during fasting. Chewing and swallowing also helps to keep the mouth clean.

20) Bedridden patients:

Bedridden patients suffer from offenssive breath due to thick coating on the tongue. water intake is also limited in these patients. Regurgitation of food aggravates the condition. Since they talk less aeration in the oral cavity is reduced which favours anaerobic bacteria to become active.

21) Diseases of stomach & esophagus:

Eructation of gas and food produce unpleasent smell. Abnormality in the function of lower sphincter can allow the food to regurgitate upwards causing bad breath. Bad breath is also common in gastritis,gastric ulcer and cancer of stomach.

22) Intestinal diseases:

Bad breath is common in patients suffering from ulcerative lesions of intestine like ulcerative collitis..Other diseases are malabsorption syndrome intestinal tuberculosis, peritonitis ect.

23) Diseases of lungs:

Lung diseases like pneumonia, lung abscess,chronic bronchitis,bronchiectasis,tuberculosis, lung cancer ect can produce bad odor during expiration.

24) Liver disorders:

Liver diseases like hepatitis, cirrhosis,can cause bad breath.Gall bladder diseases with vomiting also causes unpleasent odor.

25) Psychiatric patients:

Bad breath is common in psychotic patients due to poor hygiene,irregular food

habits,less water intake and ect.

26) Somatisation disorder:

This is a psychiatric disorder charecterised by the presence of a physical symptom that suggest a medical illness .These patients come with physical complaints like pain,nausea difficult respiration, bad smell ect. This condition is diagnosed after detailed examination of the patient with all investigations.Since this is a psychiatric disorder it has to be managed with a psychological approach.

[THE POINTS MENTIONED IN THIS ARTICLE IS FOR GENERAL INFORMATION. ANY PERSON HAVING BAD BREATH SHOULD CONSULT A QUALIFIED DOCTOR]