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Halitosis

MSc. oral medicine

## Definition

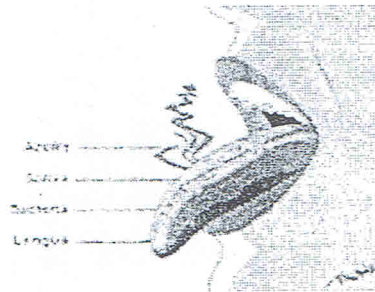
- is a term used to describe unpleasant odor emerge from the breath (bad breath), regardless whether the odor from oral or non-oral sources.
- Originated from two words:
  - Halite ----- breath
  - Osis ----- disease

## Source

- Halitosis generally arises as a result from bacteria decomposition food particles, cells, blood and chemical compound of saliva.
- Protein  $\rightarrow$  proteases  $\rightarrow$  peptides (sulfur containing amino acid)
- Catabolism of peptide by gram negative anaerobic bacteria to form VSC and lead to bad breath.

## Causes of halitosis

- Local Causes
- Systemic Causes



## Local Causes

### A. oral causes:

- Poor oral hygiene
- Food impaction
- Infection
- ANUG
- Dry socket
- Malignant tumor
- Pericoronitis
- Chronic periodontal disease
- xerostomea

### B. Nose & pharynx causes:

- Pharyngitis
- Tonsillitis
- Sinusitis
- Malignant tumors

## Systemic Causes

- Respiratory Tract Infections
- Diabetic Ketoacidosis
- Kidney Failure
- Liver Failure
- Dehydration

## Medications Can Causes Bad Breath

- Trimterene: used to treat high blood pressure and edema
- Paraldehyde: treat seizures
- Disulfiram: treat alcoholism
- Antihistamines
- Cytotoxic Drug

## Classification

- Genuine Halitosis
  - 1) Physiologic Halitosis
  - 2) Pathologic Halitosis
- Pseudo Halitosis
- Halitophobia

### 1. Genuine Halitosis

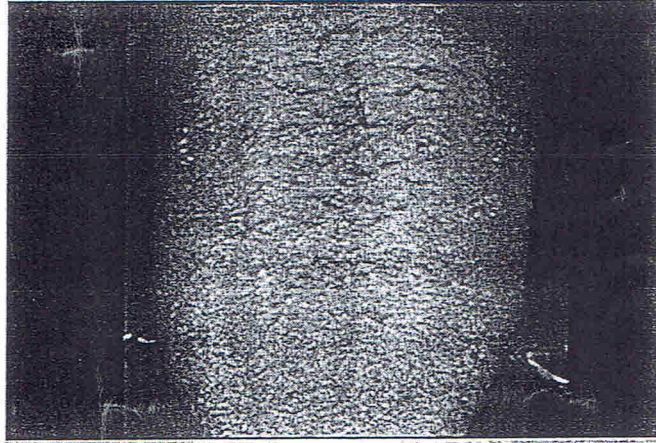
- Physiological Halitosis

Morning breath odor, tobacco smoking & certain food (onions, garlic), alcohol, starvation, medication.

- Pathological Halitosis

- 1) Intra oral or extra oral origin
- 2) Bacteria, volatile sulphur compound

## Tongue Coating



- **Intra Oral Origin:**

- 1) Poor Oral Hygiene
- 2) Dental Caries
- 3) Periodontal Disease
- 4) Tongue Coating

- **Extra Oral Origin:**

- 1) Respiratory Tract Infection
- 2) Chronic Sinusitis & Tonsillitis
- 3) Kidney disease
- 4) Liver cirrhosis
- 5) GIT disease

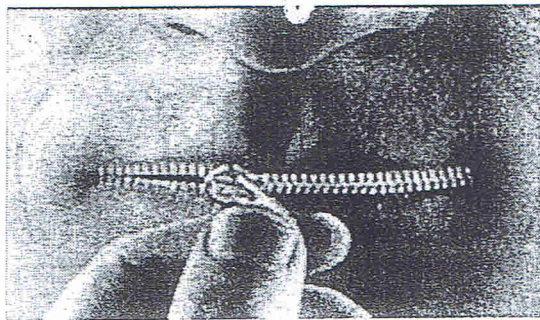


## 2. Pseudo Halitosis

- Obvious malodor is not perceived by other, although the patient complains of its existence, condition can be improved by counseling & simple oral hygiene measures.

## 3. Halitophobia (Delusional Halitosis)

- Exaggerated fear of having halitosis



## **Diagnosis**

### **A. History**

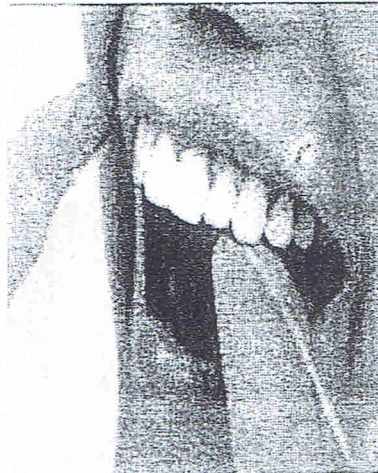
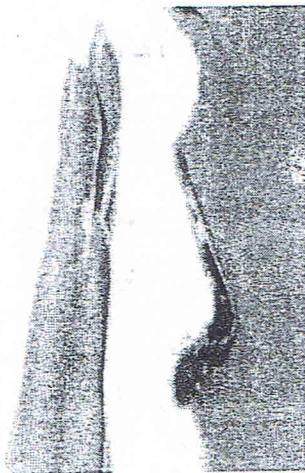
1. Onset/duration
2. Constant/ intermittent
3. Self reported or reported by other
4. Systemic disease or medication
5. Currently under stress

### **B. Examination**

1. Tongue coating , black hairy tongue , fissure tongue
2. Periodontal disease
3. Tonsillitis
4. Dry mouth
5. Oral ulcerative lesion
6. Post nasal drip
7. Dental sepsis

## C. Detection

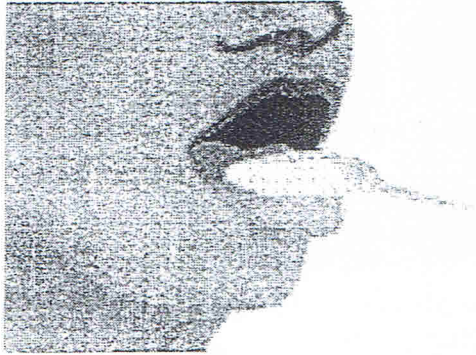
1. Self Assessment Test
2. Wrist Lick Test
3. Spoon Test
4. Dental Floss Test
5. Saliva Odor Test





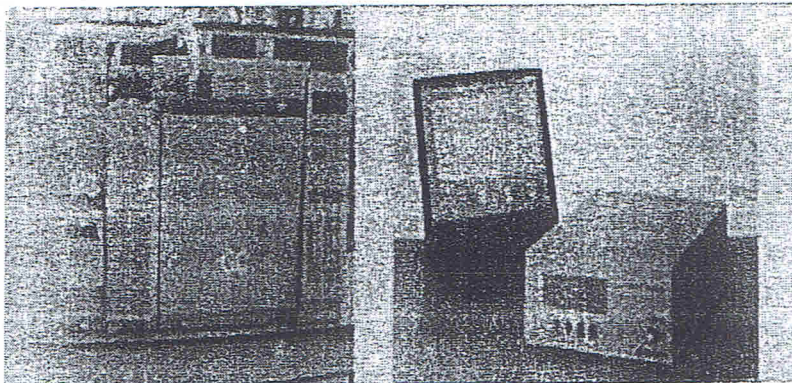
### Spoon Test:

- Scrape the dorsal surface of the tongue, smell the spoon to detect any odor.

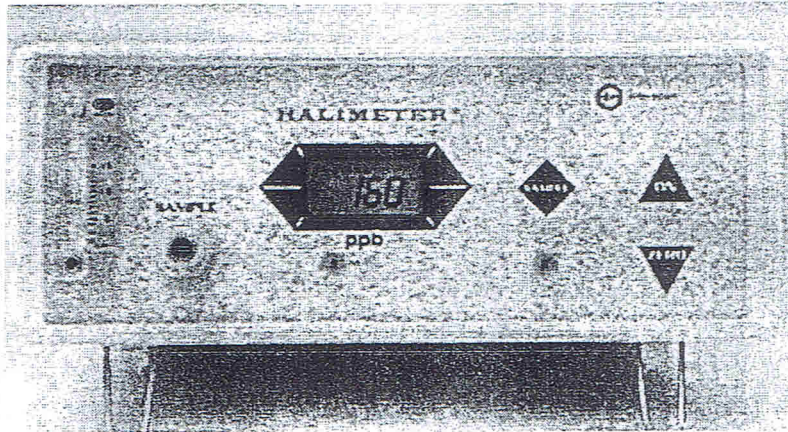


### **Some Devise Used To Detect Halitosis**

#### 1. Gas Chromatography



## 2. Halimeter



## **Preventive Measures**

- Visit dentist regularly
- Brushing of teeth twice daily
- Periodical tooth cleaning
- Use of tongue scraper
- Flossing after brushing to remove food particles
- Chewing gum free sugar

## Management Of Halitosis

1. Mechanical reduction of intraoral nutrient and micro-organism (tooth brush, intra dental cleaning, chewing gum)
2. Chemical reduction of oral microbial load (mouthwashes, chlorehexatidine, hydrogen peroxide, fluoride application use)

3. Conservative of volatile sulfide compound (metal salt solution, tooth paste, chewing gum, mouthwash contain zinc ion)
4. Masking the malodor (mouth spray, rinses, lozenges containing volatiles)
5. In xerostamia, increase fluid intake and citreous fruits, vitamin C

THANK YOU ..