Offensive Odours

in the

Breath.

---

Graduation Thesis by

Clements. D.G. Hailes.

M.B., C.M. Edin.
Chales ou Offenche Ode
in he Meath
A. D. 845
He seems to know nothing
Of the future battle due
to another DesMeath

A. D. 845
Offensive Breath is a symptom accompanying various affections of the tissues of the Respiratory and the Alimentary Systems, certain Constitutional conditions, the administration of certain drugs, and articles of food. Its causes are therefore numerous and the treatment depending on them must consequently be varied.

It occurs in different degrees, from a disagreeable odour, to a factor so great, as to render the presence of the subject of the complaint unbearable to his companions, and sometimes so objectionable to himself, as to cause the greatest depression of spirits, and actual self disgust.

It is therefore a subject worthy of the Practitioner's careful consideration, as his aid is constantly sought to remedy it.

Commencing with the Respiratory System, it will be my object in this paper to point out the various diseases causing it, and a method
for combating, and alleviating this distressing symptom, while the actual cure can only be obtained by the total elimination of the cause.

It may occur in an apparently healthy individual but careful investigation will probably reveal some trivial disorder with the treatment of which it will disappear, and is thus accounted for. In fact a great many cases of foul breath arise from somewhat insignificant causes.

Respiratory System.

Ozoena. The nasal mucous membrane may become chronically inflamed, and produce a very foul discharge. This is common in young women when the health is lowered from any cause and consequently must be treated by paying special attention to the state of the general health. Fresh air and exercise should be recommended, together with tonics, such as Cod Liver Oil and the Iside of Iron, both of which are specially indicated.
in the Strumous Constitution. Quinine and Chemical food. At the same time local treatment must not be neglected, the nasal douche should be used two or three times daily with diluted Condy's fluid, Carbolic Acid lotion, Sanitas, or any antiseptic, while in more chronic cases, astringent lotions, such as the following may be necessary. Alum $0\text{.}4\text{.}$ gts to the ounce of water, Chloride of Lime $2\text{.}$ gts to the ounce, Nitrate of Silver gts to the $2\text{.}$ gts.

Syphilitic Ulceration of the mucous membrane, is a form of Dacrya or cause of it, for which the application of Iodoform powder, or solution of Mercuric Perchloride, Calomel, etc., together with Antisyphilitic remedies internally is indicated.

Polypi (mucous or fibroid) of the nasal passages are accompanied often by this symptom. The treatment consists in removal of the polypus, by twisting the pedicle with forceps, and then using astringent, and antiseptic injections. Sometimes in cases of fibroid polypus, removal entails a much
more severe operation.

Disease of the Nasal bones, Ethmoid, etc., is a not uncommon cause, a constitutional cause, must be sought for, and specifically treated, the general health must be attended to, at the same time as local remedies are exhibited, antiseptic injections, and removal of the diseased pieces of bone, where practicable.

Foreign Bodies in the nose are often a cause of this symptom in children, shot, slate pencils, stones, and more especially peas, are often put in while playing, and the child forgets, and tells no one, or is afraid to tell, until this symptom accompanied by discharge makes it apparent; these articles must be removed with forceps, or a loop of silver wire, and then soothing applications should be made, with, if they have caused much ulceration, the application of Caustics.

Ulceration of Soft Palate or Fauces, if syphilitic requires anti-syphilitic treatment, otherwise attention to the general health with administration of Chlorate of Potash,
Astringent, and deodorising gargles. Such a solution of Permanganate of Potash, Decotion of Eucalyptus Globulus leaves, Compound Tincture of Benzoin, or a concentrated solution of common salt, or these may be used with a spraying apparatus with advantage.

Diptheria, in this disease, it is a matter of unimportance (the treatment of foul breath) the disease itself being so grave a malady, nevertheless inhalations of, and painting the fauces with Liquid Extract of Eucalyptus Gum 1 part to 3 of water, is useful as allaying this symptom, and also acting as an antisepctic, and styptic.

Bronchial affections in all of these accompanied by purulent expectoration it may be present, but is specially prominent in Gangrene of the lung and in Bronchietasis. Turpentine which is indicated in these diseases will aid in subduing it, but in addition inhalations of Carbolic Acid, Creasote, Eucalyptus Globules, Pure Ferbribe, as recommended by Dr. Kerrell for Winter cough, in the
British Medical Journal for Dec 12th 1885, pp. 493-4. (vide also Extra Pharmacopoeia p. 250), and which I have since used myself most successfully; administered internally, both subdues this distressing symptom, and acts as a curative agent on its cause.

Alimentary System.

Epithelioma of the lip. Here the best treatment is removal of the disease by operation, as soon as the diagnosis is complete, it being the only hope of cure.

Ulceration of the Gums or Tongue may be simple, syphilitic, or cancerous. A simple ulceration is generally due to stomach derangements which must be corrected, at the same time, Sec. Chlorate of Potash, as a gargle, or in the form of tablets, or Condyl's fluid diluted, be used (the latter also as a gargle). If simple treatment of the stomach fails to cure them, caustics may be applied locally. Again simple ulceration may be due to mechanical irritation, as
from a tobacco pipe, or remains of a tooth. Here treatment consists in removal of the cause, in the latter case by the dentist, and meanwhile while the ulcer is healing, nothing is better than the Chlorate of Potash to be allowed to dissolve slowly at the site of the ulcer.

b. Syphilitic ulceration, requires appropriate constitutional treatment, and deodorising gargles locally.

c. Carcinous ulceration, is to be treated by operation where practicable, and this symptom may meanwhile be palliated by washes or gargles of antiseptic, and deodorising quality.

Caries of the Teeth. is a common cause or even simple neglect of cleanliness, with regard to them, here cleanliness must be observed, washing with plain water, diluted Condy's fluid, salt and water, or any deodorising lotion, or chewing such substances as Iris root, Gentian Root, Vanilla, or Cascarilla Barkes, and use of tooth powder such as Charcoal, or Iris Root & Prepared Chalk in equal proportions, should be encouraged, while the Dentists' aid...
must be sought to remove the decayed tooth or portion of the tooth.

Caries of the Bones of the Jaw is another cause of this symptom, offensive breath; it may arise from working amongst the fumes of Phosphorus, in which case separation from the cause is imperative; it may be syphilitic calling for antisyphilitic treatment, and toxins mercury should be avoided here, as it is sometimes the cause of resorption of the bone, which is prevented by taking care never to administer it to the client of salivation. Again, caries of the Bones of the Jaw occurs in some strumous people, after fevers, calling for Cod Liver Oil with Jodide of Iron; and in all these cases local treatment must be attended to, the dead bone being removed by operation, with as little disturbance of the new bone-forming material as possible, and antiseptic and deodorising dressings.

Sialalitis: Here it is often a prominent symptom, best treated by Chlorate of Potash, or gargles composed of antiseptic
materials, hyposulphite of soda being amongst the best.

Cancer of Oris, again in this disease, it is very prominent, and the treatment must be that calculated best, to check the disease. Iron, Bark, and Ammonia should be administered, the bowels regulated, the mouth washed frequently with Chlorate of Potash, or Hyposulphite of Soda in solution, Pot ash, and Brandy given when required, and when the slough is separating, strong nitric acid, or lumar caustic may be applied.

Tonsilitis, it is very marked in this disease, and can only be combated by treating the disease, putting in the gargles and inhalations such deodorisiers as Oleum Eucalypti Globuli.

Cancer of Oesophagus, palliative treatment can only be employed here, anti-septic mouth washes.

Diverticulum of Oesophagus. Here it may arise from decomposition of the retained
food. I have never heard of a case in which this symptom was noticed, but should it arise, the treatment indicated is undoubtedly removal of the decomposing matter with a strong saline.

We now come to some diseases which are perhaps the commonest causes of this symptom offensive breath, those connected with the digestive, and immuno-logic processes, the first of which to be considered is,

Cataract of the Stomach. In the acute cataract arising from cold, or from eating unripe or overripe fruit, the pain is so prominent a symptom as to render the one or are considering beneath notice, though present - and the disease being of such short duration, two to three days, no special treatment for the disagreeable odor is necessary, but in the Chronic cataracts arising from the frequent recurrence of acute attacks, from error of diet long continued, as the persistent use of spirits, conduits etc., it becomes a prominent symptom. It is best treated by administering the Tincture of Iodine, and Carbolic Acid
in drop doses freely diluted three times a day immediately before meals, or Carabolic Acid in with 8grs of Bismuth Subnitrate, suspended in Brucilage. The Carabolic Acid seems to check the fermentation, and thus stops the formation of noxious gases. This treatment I have found most useful in suppressing the odours, especially that disagreeable one smelled by the habitual dram drinker, and at the same time it acts as a curative agent to the disease. It is the treatment recommended for catarrh of the Stomach by Bartholomew in his "Practice of Medicine" p. 28.

Biliousness arising from any derangement of the Liver, such as Stiff congestion or a catarrh of the bile ducts, is another common cause, or more strictly speaking the Biliousness, and Foul Breath are concomitant symptoms in these derangements of the Liver. Treatment here consists in the administration of a cholagogue followed by a purgative.

Chronic Diseases of the Liver. Any chronic disease of the Liver, by interfering with
the secretion of bile, itself an antiseptic may give rise to this symptom, the fermentative faecal gases probably finding their way through the pyloric orifice, into the stomach, and therefore the introduction of antiseptics into the stomach seems the rational treatment, such as Carbolic Acid in drop doses, Charcoal in powder or as bicarbonate diluted Condyl’s fluid etc, whilst we endeavour to restore the secreting functions of the liver by chologogue, and general constitutional treatment.

Obstruction of the Bowels from any cause may produce this symptom. Obstruction may even cause regurgitation of faecal matters into the stomach, or even vomiting of faecal matter, the breath consequently acquiring a distinctly faecal odour. Here removal of the obstruction is the only cure, and meanwhile disinfectants such as suggested in the previous paragraph may be used.

Worms In children who suffer from worms, the breath is generally very foul, the treatment consists in giving Vermifuge, Santonin, Mal feem, Castor oil etc
Habitual Constipation is generally accompanied by this symptom. Here general constitutional treatment, Pierre lonic, tinctures, and laxatives are called for. But Veronia, Belladonna, Sulphur, and the fluid extract of Cascara Sagrada are examples of useful drugs.

Patency of Pyloric Orifice (?) There is a certain class of cases, in which one fails to trace any definite cause. I am in the habit of treating these as if due to an escape of faecal gas, maybe even matter, through the pyloric opening, and whilst carefully regulating the bowels, and attending to the general health, recommending the administration of dilute Condly’s fluid 37 or 42 to a pint of water; charcoal biscuits, or the powder which can be had in capsules prepared by J. Roberts & Co. 147 Oxford St., London, or in paste, immediately after the morning evacuation. The mouth at the same time being washed & the throat well gargled with some antiseptic substance, carbolic lotion, Condly’s fluid.

*On the supposition that the reflex is more likely to occur during that operation, than any other time, at same time as the anal sphincter relaxes.
Sanitas, common salt, and water being among the best. Whilst chewing such substances as Iris Root, Gentian Root, Cascarilla Bark, which are easily carried in the pocket, are good for temporarily masking these odours.

**Urinary System**

Diabetes Mellitus. In this disease there is a peculiar sweetish odour perceivable in the breath, often likened to the smell of new mown hay; therefore it can hardly be described as an offensive odour. In the later stages there is often a smell of acrolein in the breath, likewise hardly offensive, though to some it may be disagreeable.

Uraemia. In some cases of Uraemia there is a disagreeable ammoniacal odour in the breath. Consciousness being almost always lost, any special treatment for this symptom is impossible.

**Nervous System**

This symptom accompanies mental disease.
of the nervous system, but to depend on the lessons of the alimentary system, accompanying these diseases in most cases, attention must therefore be paid to the alimentary system & the nervous complaint of course treated too.

Chronic Hydrocephalus is accompanied by a peculiar streetish fermentative odour, causing horror, for no especial treatment. This I find noted down in my note book, but cannot quote my authority. I have not had sufficient cases to make me to consider it.

It is an accompaniment of every fever of a low type. Gargles and inhalations of antiseptic, and deodorizing substances, are the best palliative.

Some Constitutional Dyscrasias

Scorbutus. Foul breath is a marked symptom in this disease, & must be treated on general principles, lime juice and fish vegetables, mouth washes &c. Sometimes the gums & stomach are ulcerated, so introduction into the stomach of charcoal, in biscuit, powder, or capsule.
is useful.

Purpura is another disease which this accompanies, generally dependent on the lesions of the gums or stomach. Iron, Quinine, Charcoal, etc. are here beneficial, combined with general constitutional treatment.

Anaemia and Chlorosis. These diseases are often accompanied by offensive breath, sometimes a sweatish odour, here it is due to some accompanying alimentary disturbance, which must be attended to, as well as the ordinary Constitutional treatment.

Syphilis & Struma have been referred to under the various headings already described.

Pyaemia is accompanied by a saccharine fermentative odour. The disease is too alarming itself, to allow special attention being devoted to this symptom. If anything, antiseptic gurgles may be used.

There are now certain drugs and articles
of food to be considered. These it will suffice to enumerate, the only way to prevent them tainting the breath is avoidance of their use, though the odour of some of them may be masked by other substances.

**Drugs**

- Asafoetida a very marked odour
- Copaiba a peculiar odour
- Sandalwood a peculiar heavy odour
- Peppermint opinion differs on this drug, some disliking, some liking the odor.
- Phosphorus a garlick like odour
- Mercury its prolonged use causes a most disagreeable odour.

Sulphur forms sulphides in the stomach amongst others. Sulphuretted hydrogen, with a smell like rotten eggs.

Ammonia not disagreeable to try.

Creasote generally considered unpleasant.

Muskrat is objected to by some.

Santalum a heavy pungent smell like sandal wood boxes smell, not altogether disagreeable.

Tobacco. There is great diversity of opinion regarding the pleasantness or unpleasantness of tobacco odour.
it is masked by chewing cloves, iris root, 
by peppermint etc.

Alcohol has already been treated 
of, under catarrh of the stomach, that 
is to say the odour arising from its 
prolonged use, but for masking the 
odour after meals or anytime, iris 
root, or gentian root chewed, are the 
most beneficial.

Several of the above mentioned odours 
causd by drugs can be masked. For 
instance Peppermint masks most of 
the others. Cinnamon is best for that 
of Sandal wood. Iris root, Barcarilla 
Bark, Gentian Root, Lavander to cry, 
and gargling with perfumes, are all 
useful in subduing them.

Foods: Principal amongst these ar-
ticles of diet causing disagreeable, 
odours in the breath, is the Onion, 
for which chewing common parsley 
with or without vinegar is a first-rate 
anitdote.

High Game, Meat, etc, also 
Dishes flavoured with various Substances 
may leave a temporary unpleasant 
odour in the breath, for which rinsing 
the mouth with water is an antiseptic
is the best remedy.

RESUMÉ.

It will be seen from the foregoing facts that Offensive breath is a symptom accompanying many diseases, and disorders chiefly of the Respiratory and Alimentary Systems, often due to local disease, often to a constitutional taint, sometimes as in the case of food and most of the drugs enumerated above, to a temporary cause. What I have endeavoured to point out is that it is not a disease in itself, but a symptom, and therefore must not be treated as a special complaint, calling for deodorizers, and in my case on the same lines, but, although deodorizers may be used as temporary masks, for an actual cure, it is absolutely necessary to trace some definite cause, and treat it when found, it may be local, temporary, constitutional, and must be accordingly treated, whilst palliative treatment may be employed, during the progress of treatment of the radical
cause. This cause can almost always be found, but there is one class, I have mentioned above where no definite disease either to be treated, in which case it is necessary to theorize and I have found the treatment of that class of cases as if due to a kind of leakage of gases from the lower intestinal track, into the stomach, and upper parts successful in most cases, and therefore venture to propose its trial.

When we consider the discomfort caused to others, by a person possessing foul breath, and this discomfort is so great in people with sensitive olfactory nerves, making them shun the society of those afflicted with it, it will be seen that the subject of the causes, and treatment of this symptom is a matter of no mean importance, and will be sufficient apology for my having selected it, as the subject of this thesis.

Clement C. Hailes.
M.B., M.R. Edin.

April 1866.