

The nurse of Mrs. Adams (where the fever commenced) was attacked in a day or two after her death with erysipelas of the head and face, so severely as to be disfigured considerably, yet finally recovered. In the other families nothing of the kind took place.

HIRAM HOLT, M.D.

*Pomfret, Conn., June 8th, 1855.*

## ON THE OPHTHALMOSCOPE.

[Communicated for the Boston Medical and Surgical Journal.]

DR. J. H. DIX, of Boston, presented to the Suffolk District Medical Society, at its last meeting, the ophthalmoscope of Helmholtz, as improved by Coccius, and explained the method of using it for the exploration of the textures of the globe of the eye posterior to the iris. He spoke of it as an instrument destined perhaps hereafter to throw some light upon the pathology of these textures. He considers it to be an instrument capable of great harm when injudiciously used. Pain may be induced in an eye, the vision of which is wholly extinct, by exposure to it for four or five minutes, a longer period than which should never be occupied in one examination. The greatest, and probably the only practical advantage at present attainable by the instrument, is the sparing of the patient a useless and harassing treatment in some cases of amaurosis of which the ophthalmoscope may demonstrate the cause to be irremediable organic change of texture of the retina. In reply to a question by Dr. Durkee, Dr. Dix said that for a full examination of the internal texture of the eye it is necessary to dilate the pupil previously, those cases only excepted in which the crystalline is wanting.

## ON THE INDICATIONS OF TRACHEOTOMY DERIVED FROM THE PRESENCE OF FOREIGN BODIES IN THE AIR-TUBES.

BY M. CHASSAIGNAC.

TRACHEOTOMY is indicated whenever there is imminent danger of suffocation, produced by a material obstacle to the passage of air through the trachea.

Two classes of causes may give rise to this result: on the one hand, foreign bodies; on the other, a numerous series of affections which necessitate the establishment of an artificial channel for the introduction of air into the lungs.

First of all, I shall say a word as to the suitable moment for the performance of the operation. First, in cases in which there is absolute certainty of the existence of a foreign body in the trachea, the rule is to operate instantly, if the other means we possess of producing the expulsion of such a body have proved inefficient;

The Boston Medical and Surgical Journal as published by

taking care not to leave the patient should there be unavoidable delay in commencing the operation. Secondly, in every other case than that of the presence of a foreign body, it is the degree of asphyxia of the individual which must direct us as to the rapidity with which we should act.

Why this urgency for operation in the case of foreign bodies? Experience has shown that every individual who has a foreign body in the trachea is exposed to the danger of immediate suffocation, even when there may at the present moment exist no serious symptom, no very manifest impediment to respiration. But this individual—who just now appears so calm, whom you should be tempted to leave to himself until some new occurrence should arise to force you, as it were, to action—this individual may, all on a sudden, in a fit of coughing, and by a simple displacement of the foreign body, be attacked with an imminent asphyxia before you should have time to reach him. I am aware that an indefinite temporization has been advocated. This system owes its adoption to a very learned work of M. Mondière of London, who has collected a certain number of cases of individuals having foreign bodies in their air-passages, and who, not having been operated on, have notwithstanding survived and completely recovered, after having for a greater or less number of years retained the bodies in question. But, in the first place, these facts have reference to the, in some degree, chronic side of the question. They by no means prove that what I affirm does not exist; that is to say, the imminent danger of fatal suffocation. In the investigation of facts analogous to those mentioned by M. Mondière, the cases of death have been passed over, and they are numerous, which occur in the first periods after the introduction of foreign bodies into the air-passages. Thus, an argumentation based upon facts of this nature can lead to no conclusion with respect to what we may call the acute state.

Now I say, that even with regard to their chronicity, the facts quoted by M. Mondière do not establish the expediency of surgical non-interference; and it is sufficient to read with some attention the otherwise very curious observations he brings forward, to see that it is only through numberless accidents, which have long placed their lives in peril, that the sufferers have succeeded in reaching a spontaneous cure. Thus my assertion continues absolute on this point: from the moment a foreign body is in the trachea and a surgeon is summoned, he ought forthwith, by some means or other, to effect its removal; or if he is unwilling to resort immediately to tracheotomy, he ought to remain uninterruptedly with the patient, as he would otherwise leave him in danger of death.

It is not my intention to specify in this place the numerous varieties of foreign bodies which may penetrate into the air-passages. This enumeration, which we have in all standard works, would here be superfluous. I shall merely mention, among the divisions which might be established, that which seems capable of

giving rise to practical indications ; I mean the division of foreign bodies into soluble and fixed. It is evident, in fact, that when a rapidly soluble foreign body has got into the air-tube, the surgeon may abstain from performing tracheotomy ; on condition, however, that he does not leave his patient, and that he be prepared to act in case the solution of the body being delayed, suffocation should become imminent and seriously endanger life.

I shall, however, remark, that where the foreign body, consisting of a substance analogous to a pin or nail, should be perceptible through the trachea and integuments, we might dispense with tracheotomy, cut down directly on the body in question, and extract it by seizing it by one of its extremities.

In this question of foreign bodies, three points alone interest the practitioner :—Is there a foreign body in the air-passages ? Ought it to be extracted ? By what kind of operation ought it to be extracted ?

It is often very difficult to attain to absolute certainty as to the existence of a foreign body in the air-passages. The history of the case, which is capable of furnishing valuable information on this subject, cannot always be obtained ; and on the other hand, the causes of symptoms analogous to those which the presence of a foreign body in the air-passages may produce, especially in children, are sufficiently common to give rise to serious doubts. It will, therefore, be useful to recapitulate the circumstances calculated to elucidate this part of the diagnosis. These are, first, convulsive and jerking fits of coughing ; secondly, a fixed pain, which the patient refers to the part of the air-passages in which the foreign body is situated ; thirdly, the tremor (*grelottement*) perceptible to the ear and to the hand, a sign on which Dupuytren has laid much stress ; fourthly, the existence of a deep, dull, and general pain ; fifthly, impeded respiration in one side of the chest ; sixthly, in fine, diminution, or even complete cessation, of vesicular murmur in the same side, coincidently with persistence of normal resonance on percussion.

From the combination of these signs we may ascertain, if not always, at least in a certain number of cases, not only that a foreign body is present in the air-passages, but we may also determine its exact situation.

Ought the foreign body to be extracted ? I have already sufficiently dwelt on the consideration of this question.

By what kind of operation will it be advisable to extract the foreign body ? The opinion I hold on this point differs so much from what has hitherto been taught, that I shall be obliged to enter into some details.

I begin by laying down that in all cases, and whatever may be the present situation of the foreign body, tracheotomy must immediately be had recourse to. On this point there could not be the shadow of a doubt in those cases in which the foreign body exists in the trachea or bronchial tubes. For the idea of withdrawing

through an opening in the larynx, bodies so situated, can have occurred only to surgeons who have never sufficiently reflected on the anatomical construction of the parts, or on the difficulties of the operative manipulation. But if, as we have had instances, the foreign body should be fixed in the larynx, whether above or below the glottis, or even in the ventricles, would not one or other species of laryngotomy be fairly indicated? Such is not my opinion; and I think that it is even then to tracheotomy that we must have recourse. In the first place we must bear in mind that during an operation such as consists in extracting a foreign body contained in the larynx, numerous causes of suffocation may arise: the flow of blood, or even the falling into the trachea of the body we wish to withdraw from the larynx.

I say, then, that we must above all provide for the security of the respiration; and this can be done only by having a tracheal opening, admitting, if necessary, of the introduction of a canula, that the surgeon may give all his attention to the delicate operation he has to perform on the larynx. On the other hand, we should observe that through the opening formed in tracheotomy we may completely remove from below upwards certain foreign bodies arrested in the larynx, or repel them into the pharynx or the cavity of the mouth.

Thus I say, that we must in all cases adopt tracheotomy: first, because if the foreign body occupies the trachea or bronchi, it is the only operation that can be entertained; secondly, because in the case of foreign bodies in the larynx, it is better adapted than laryngotomy to attain our object; thirdly, in fine, because in cases in which the absolute necessity of acting directly on the larynx may have been recognized, the tracheal opening plays the part of a safety-valve, calculated to protect the life of the patient during the course of a delicate and difficult operation, the execution of which is facilitated by preliminary tracheotomy.

Foreign bodies retained in the pharynx, and especially in the œsophagus, may become a cause of asphyxia so imminent, that if it should be impossible to extract them instantly we must have recourse to tracheotomy to fulfil the most urgent indication. In this we follow the example of Habcot, who opened the air-passages in a young man threatened with suffocation in consequence of having swallowed some pieces of gold enclosed in a linen cloth.—*Moniteur des Hôpitaux*, in *Dublin Quarterly Jour. of Med. Science*.

## ON THE CHLORIDE OF ZINC AS A CAUSTIC IN CHANCRE.

BY JAMES H. CONWAY, M.D., RICHMOND, LA.

FOR several years I have been in the habit of using the chloride of zinc as a caustic to chancres, to the exclusion of all other agents of the kind; and although I do not claim originality in the use of the remedy so well known to the profession, yet its application was